

Supplementary Information

Synthesis and evaluation of antiproliferative activity of new hetarylmetylidene derivatives of imidazothiazolotriazinones

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NCI-60 Screening Methodology

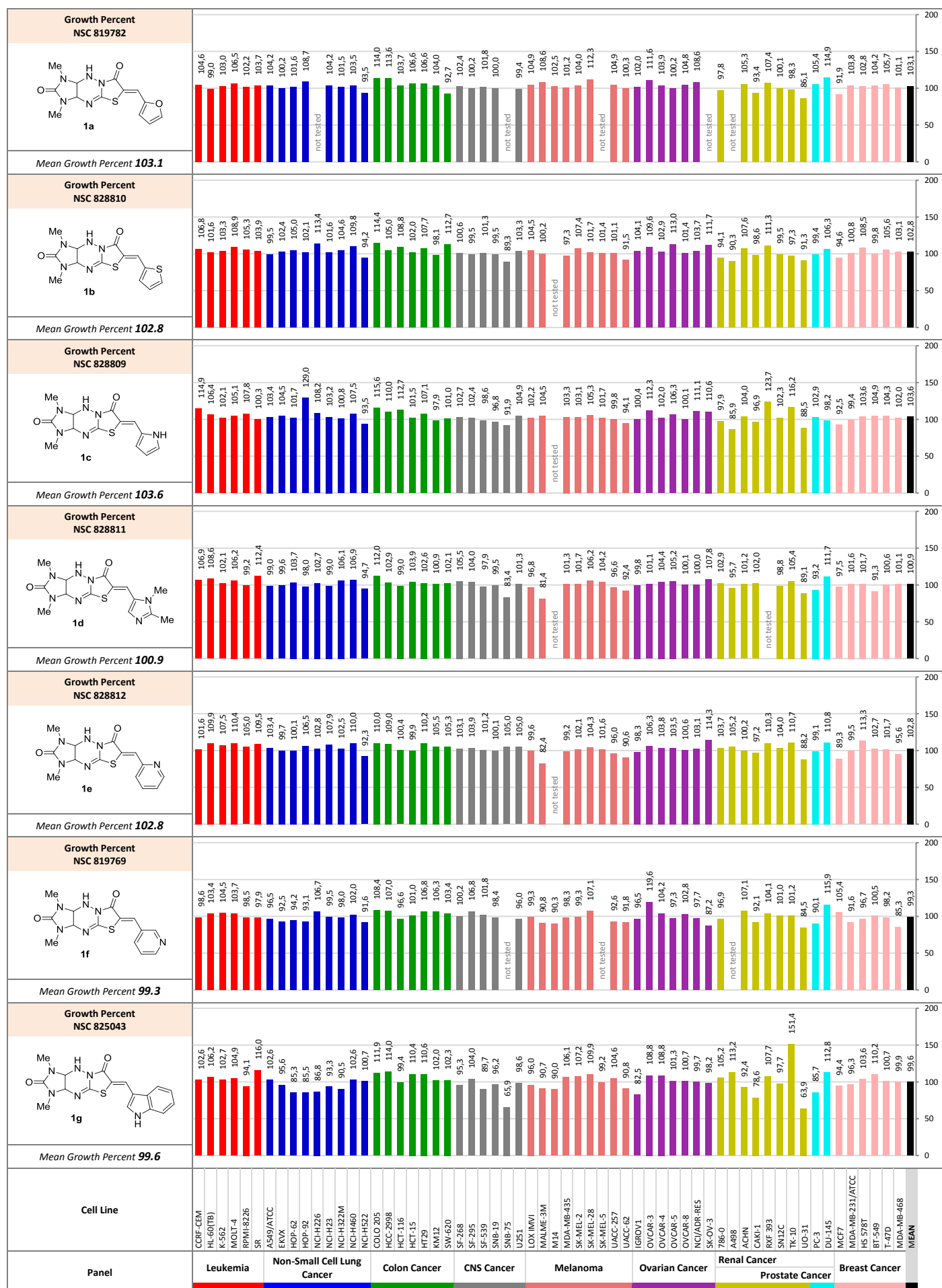
General Description:

As of early 2007 all compounds submitted to the NCI 60 Cell screen are tested initially at a single high dose (10^{-5} M) in the full NCI 60 cell panel. Only compounds which satisfy pre-determined threshold inhibition criteria in a minimum number of cell lines will progress to the full 5-dose assay. The threshold inhibition criteria for progression to the 5-dose screen was selected to efficiently capture compounds with anti-proliferative activity based on careful analysis of historical DTP screening data. The threshold criteria may be updated as additional data becomes available.

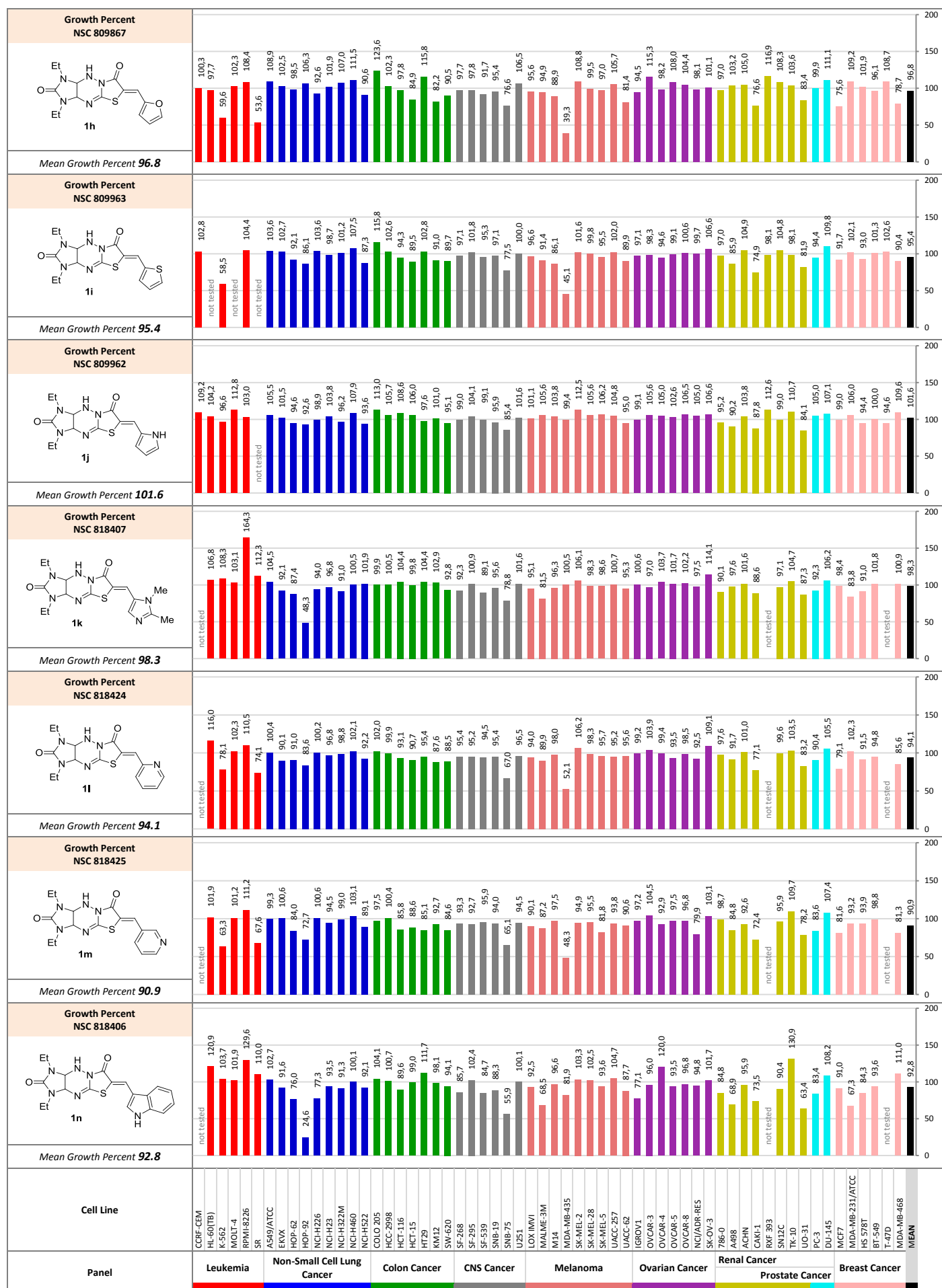
Interpretation of One-Dose Data:

The One-dose data will be reported as a mean graph of the percent growth of treated cells and will be similar in appearance to mean graphs from the 5-dose assay. The number reported for the One-dose assay is growth relative to the no-drug control, and relative to the time zero number of cells. This allows detection of both growth inhibition (values between 0 and 100) and lethality (values less than 0). This is the same as for the 5-dose assay, described below. For example, a value of 100 means no growth inhibition. A value of 40 would mean 60% growth inhibition. A value of 0 means no net growth over the course of the experiment. A value of -40 would mean 40% lethality. A value of -100 means all cells are dead. Information from the One-dose mean graph is available for COMPARE analysis.

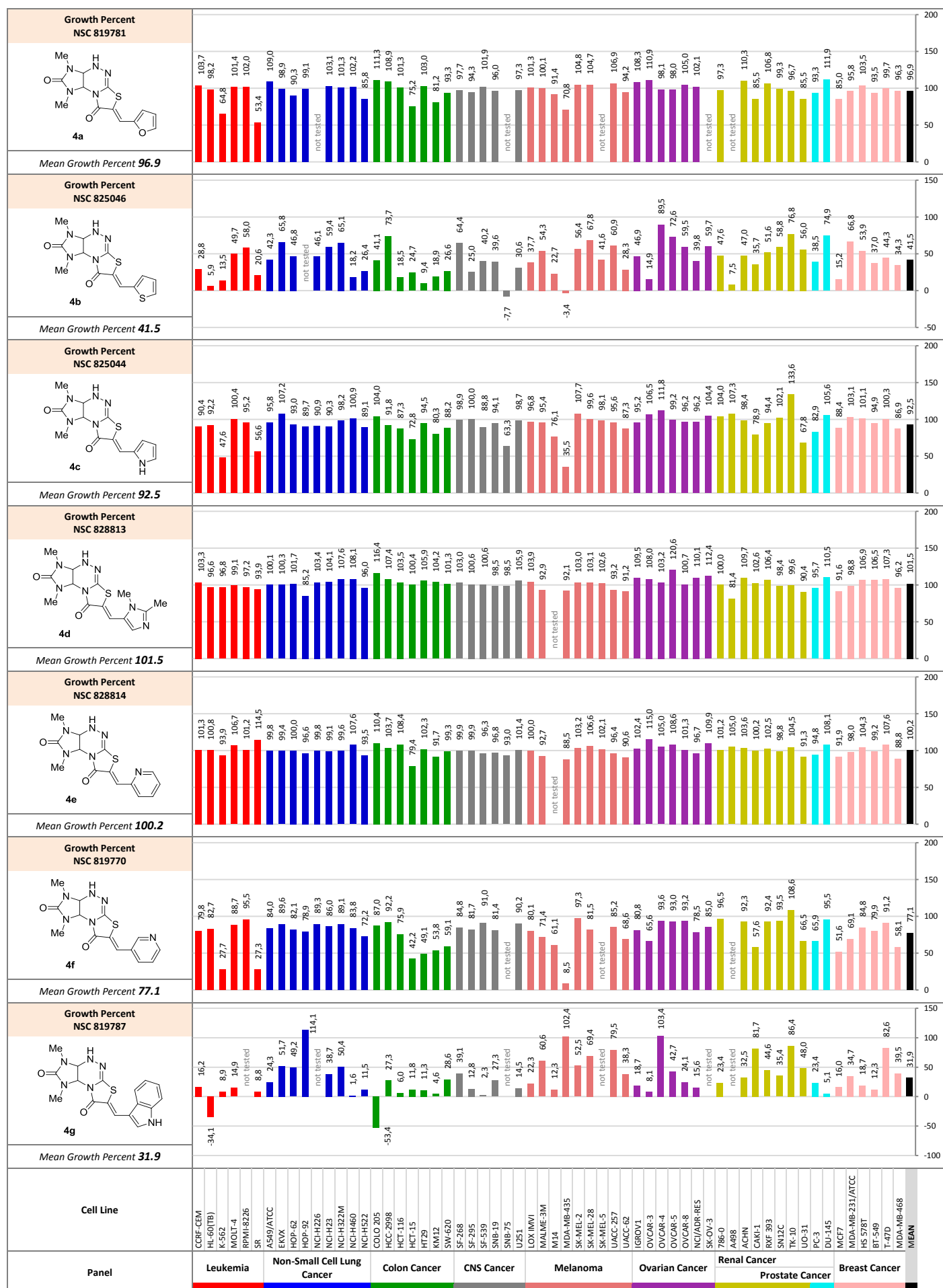
Anticancer Screening Data of 60 Cancer Cell Lines Assay at 10 $\mu\text{mol/L}$ Concentration



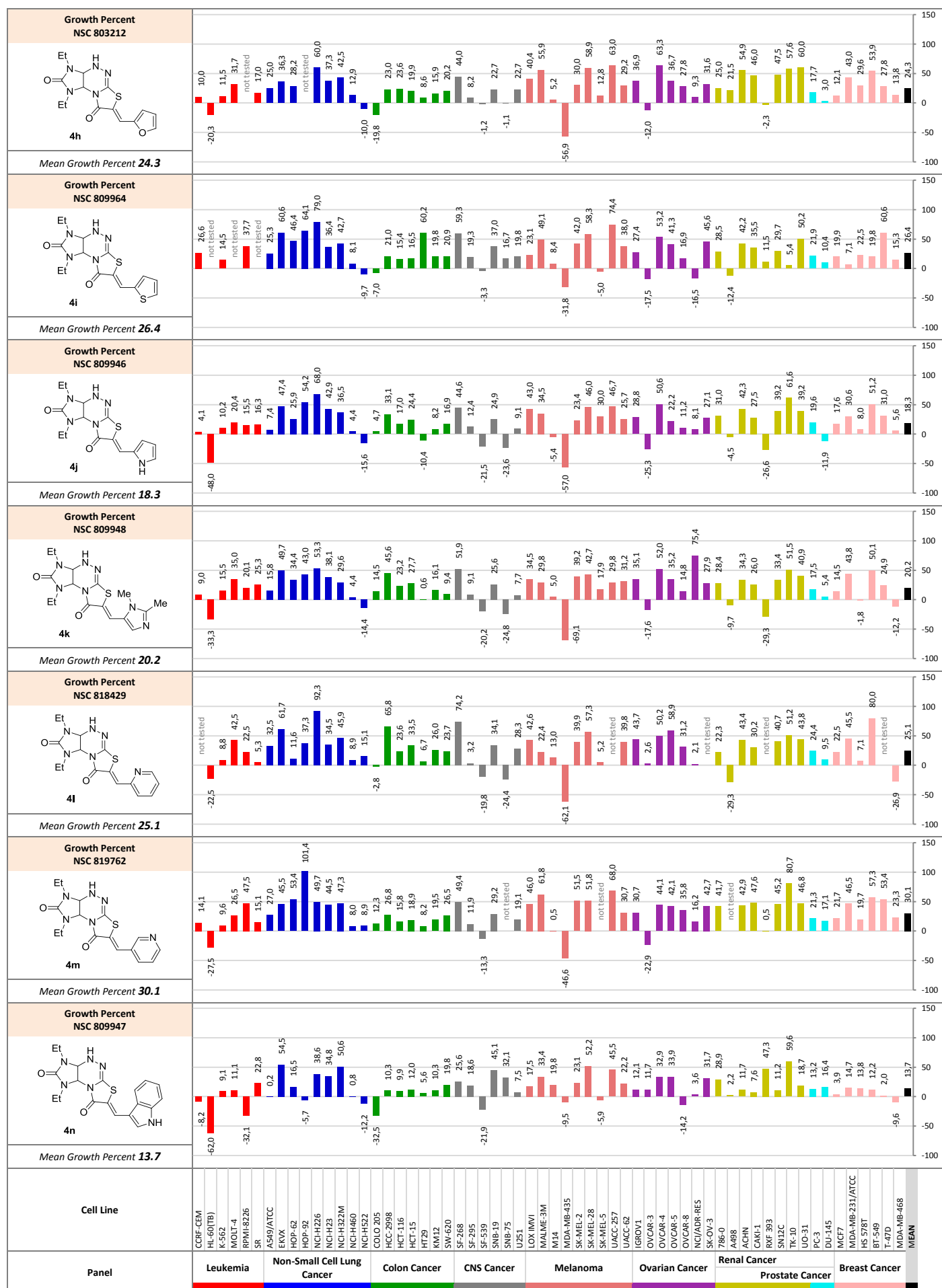
Anticancer Screening Data of 60 Cancer Cell Lines Assay at 10 $\mu\text{mol/L}$ Concentration



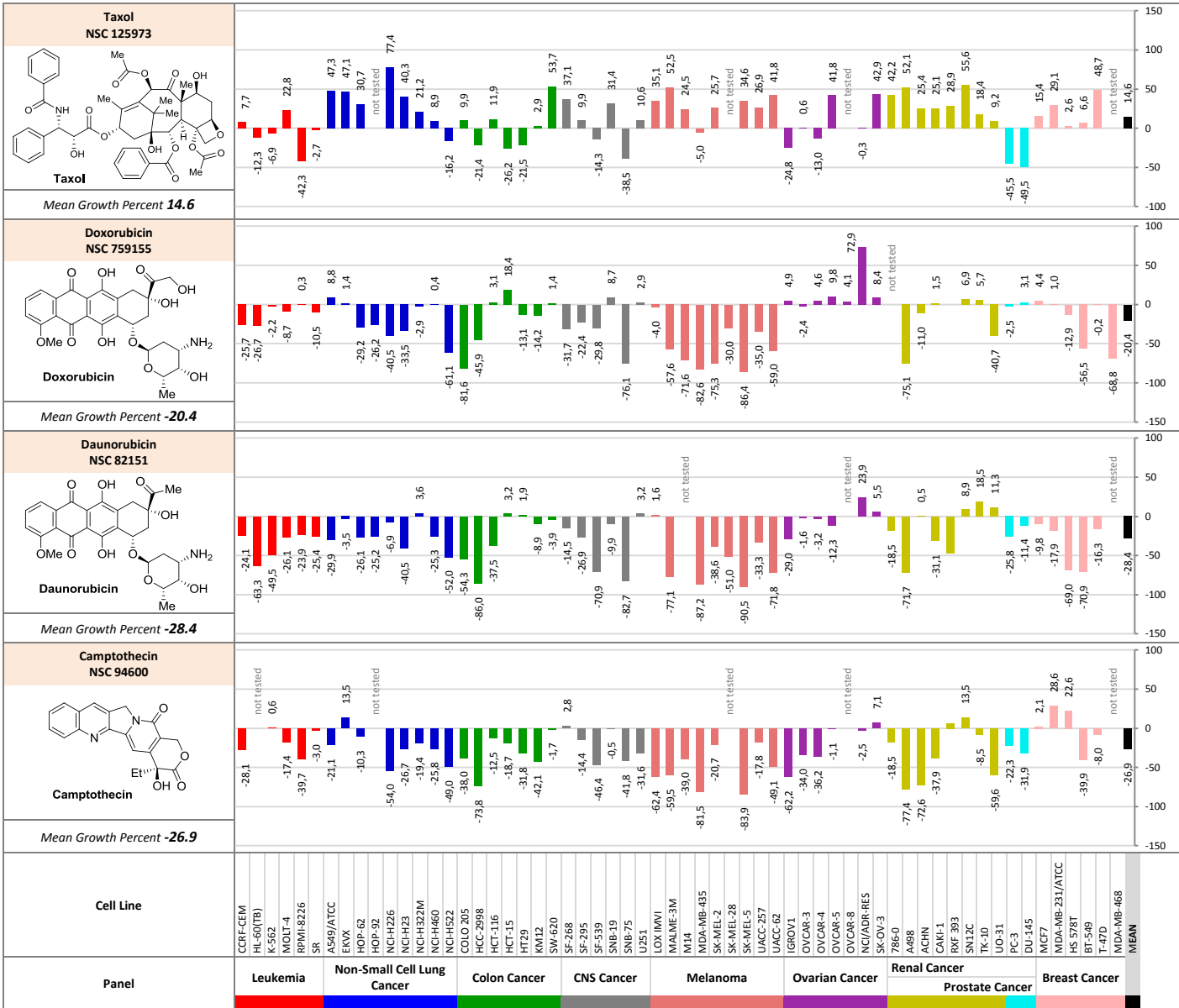
Anticancer Screening Data of 60 Cancer Cell Lines Assay at 10 μmol/L Concentration



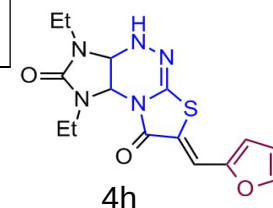
Anticancer Screening Data of 60 Cancer Cell Lines Assay at 10 $\mu\text{mol/L}$ Concentration



Anticancer Screening Data of 60 Cancer Cell Lines Assay at 10 µmol/L Concentration



National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results



NSC : D - 803212 / 1

Experiment ID : 1802NS43

Report Date : March 20, 2018

Test Date : February 26, 2018

COMI : IA552

Stain Reagent : SRB Dual-Pass Related

Units : Molar

	Log10 Concentration														
	Time	Mean Optical Densities						Percent Growth							
Panel/Cell Line	Zero	Ctrl	-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0	GI50	TGI	LC50
Leukemia															
CCRF-CEM	0.635	3.189	3.137	3.039	1.047	0.947	0.798	98	94	16	12	6	3.68E-7	> 1.00E-4	> 1.00E-4
HL-60(TB)	0.632	2.227	2.062	1.970	0.785	0.724	0.613	90	84	10	6	-3	2.86E-7	4.48E-5	> 1.00E-4
K-562	0.228	2.157	2.108	1.893	0.585	0.462	0.445	97	86	19	12	11	3.43E-7	> 1.00E-4	> 1.00E-4
MOLT-4	0.898	3.131	3.103	3.091	2.033	1.511	1.306	99	98	51	27	18	1.08E-6	> 1.00E-4	> 1.00E-4
RPMI-8226	0.798	2.582	2.564	2.600	1.281	1.066	1.030	99	101	27	15	13	4.90E-7	> 1.00E-4	> 1.00E-4
SR	0.536	2.678	2.462	1.746	0.953	1.040	0.876	90	56	19	24	16	1.50E-7	> 1.00E-4	> 1.00E-4
Non-Small Cell Lung Cancer															
A549/ATCC	0.460	2.469	2.390	2.371	1.377	1.013	0.915	96	95	46	27	23	8.15E-7	> 1.00E-4	> 1.00E-4
EKVX	0.837	2.473	2.343	2.276	1.744	1.538	1.527	92	88	55	43	42	2.70E-6	> 1.00E-4	> 1.00E-4
HOP-62	0.592	2.263	2.182	2.179	1.218	1.115	1.065	95	95	37	31	28	6.05E-7	> 1.00E-4	> 1.00E-4
HOP-92	1.191	1.724	1.683	1.612	1.308	1.474	1.315	92	79	22	53	23		> 1.00E-4	> 1.00E-4
NCI-H226	1.176	2.587	2.407	2.390	2.306	2.275	2.250	87	86	80	78	76	> 1.00E-4	> 1.00E-4	> 1.00E-4
NCI-H23	0.676	2.202	2.078	2.016	1.458	1.247	1.106	92	88	51	37	28	1.23E-6	> 1.00E-4	> 1.00E-4
NCI-H322M	0.806	1.971	1.939	1.885	1.365	1.387	1.339	97	93	48	50	46	9.01E-7	> 1.00E-4	> 1.00E-4
NCI-H460	0.274	2.633	2.727	2.688	0.709	0.529	0.402	104	102	18	11	5	4.20E-7	> 1.00E-4	> 1.00E-4
NCI-H522	0.767	1.935	1.844	1.670	0.680	0.673	0.589	92	77	-11	-12	-23	2.03E-7	7.45E-7	> 1.00E-4
Colon Cancer															
COLO 205	0.400	1.515	1.503	1.490	0.576	0.379	0.283	99	98	16	-5	-29	3.82E-7	5.56E-6	> 1.00E-4
HCC-2998	0.824	2.726	2.475	2.454	1.901	1.194	1.130	87	86	57	19	16	1.51E-6	> 1.00E-4	> 1.00E-4
HCT-116	0.282	2.486	2.449	2.268	0.780	0.546	0.464	98	90	23	12	8	3.93E-7	> 1.00E-4	> 1.00E-4
HCT-15	0.348	2.326	2.280	2.021	0.954	0.770	0.599	98	85	31	21	13	4.38E-7	> 1.00E-4	> 1.00E-4
HT29	0.233	1.595	1.623	1.560	0.362	0.297	0.270	102	97	9	5	3	3.46E-7	> 1.00E-4	> 1.00E-4
KM12	0.491	2.563	2.554	2.388	1.004	0.918	0.852	100	92	25	21	17	4.19E-7	> 1.00E-4	> 1.00E-4
SW-620	0.205	1.519	1.603	1.377	0.542	0.549	0.487	106	89	26	26	21	4.14E-7	> 1.00E-4	> 1.00E-4
CNS Cancer															
SF-268	0.664	2.324	2.205	2.131	1.377	1.453	1.162	93	88	43	48	30	7.00E-7	> 1.00E-4	> 1.00E-4
SF-295	0.875	2.897	2.733	2.648	1.388	1.142	1.133	92	88	25	13	13	4.02E-7	> 1.00E-4	> 1.00E-4
SF-539	0.901	2.472	2.456	2.440	1.232	0.883	0.805	99	98	21	-2	-11	4.21E-7	8.15E-6	> 1.00E-4
SNB-19	0.582	1.904	1.882	1.817	1.183	1.050	1.013	98	93	45	35	33	8.04E-7	> 1.00E-4	> 1.00E-4
SNB-75	0.792	1.796	1.601	1.583	1.046	1.024	1.058	81	79	25	23	26	3.44E-7	> 1.00E-4	> 1.00E-4
U251	0.345	1.909	1.858	1.850	0.784	0.609	0.554	97	96	28	17	13	4.77E-7	> 1.00E-4	> 1.00E-4
Melanoma															
LOX IMVI	0.365	2.613	2.498	2.418	1.239	1.334	0.790	95	91	39	43	19	6.13E-7	> 1.00E-4	> 1.00E-4
MALME-3M	0.477	1.227	1.220	1.197	0.935	0.840	0.837	99	96	61	48	48	7.45E-6	> 1.00E-4	> 1.00E-4
M14	0.379	1.781	1.731	1.619	0.735	0.447	0.546	96	88	25	5	12	4.07E-7	> 1.00E-4	> 1.00E-4
MDA-MB-435	0.539	2.657	2.538	1.812	0.492	0.406	0.419	94	60	-9	-25	-22	1.40E-7	7.47E-7	> 1.00E-4
SK-MEL-2	1.013	2.058	2.078	1.993	1.402	1.513	1.491	102	94	37	48	46	5.94E-7	> 1.00E-4	> 1.00E-4
SK-MEL-28	0.599	1.635	1.620	1.525	1.226	1.177	1.141	99	89	61	56	52	> 1.00E-4	> 1.00E-4	> 1.00E-4
SK-MEL-5	0.788	3.113	3.007	2.874	1.234	1.103	0.688	95	90	19	14	-13	3.66E-7	3.27E-5	> 1.00E-4
UACC-257	1.038	2.470	2.442	2.354	1.649	1.977	1.865	98	92	43	66	58		> 1.00E-4	> 1.00E-4
UACC-62	0.952	3.048	2.959	2.731	1.470	1.456	1.620	96	85	25	24	32	3.80E-7	> 1.00E-4	> 1.00E-4
Ovarian Cancer															
IGROV1	0.563	1.848	1.942	1.756	1.208	1.112	1.009	107	93	50	43	35	1.06E-6	> 1.00E-4	> 1.00E-4
OVCAR-3	0.428	1.500	1.505	1.401	0.546	0.364	0.369	100	91	11	-15	-14	3.24E-7	2.64E-6	> 1.00E-4
OVCAR-4	0.707	2.010	1.945	1.929	1.426	1.420	1.269	95	94	55	55	43	2.54E-5	> 1.00E-4	> 1.00E-4
OVCAR-5	0.504	1.597	1.590	1.511	1.046	0.799	0.734	99	92	50	27	21	9.77E-7	> 1.00E-4	> 1.00E-4
OVCAR-8	0.465	2.017	1.994	1.980	1.251	0.826	0.669	99	98	51	23	13	1.05E-6	> 1.00E-4	> 1.00E-4
NCI/ADR-RES	0.553	2.112	2.042	1.939	0.944	0.606	0.571	95	89	25	3	1	4.07E-7	> 1.00E-4	> 1.00E-4
SK-OV-3	0.841	1.954	2.000	1.995	1.330	1.352	1.282	104	104	44	46	40	7.92E-7	> 1.00E-4	> 1.00E-4
Renal Cancer															
786-0	0.646	2.610	2.551	2.477	1.368	1.281	1.080	97	93	37	32	22	5.83E-7	> 1.00E-4	> 1.00E-4
A498	1.530	2.707	2.714	2.668	1.984	1.665	1.600	101	97	39	11	6	6.35E-7	> 1.00E-4	> 1.00E-4
ACHN	0.374	1.513	1.552	1.570	0.932	0.932	0.811	103	105	49	49	38	9.58E-7	> 1.00E-4	> 1.00E-4
CAKI-1	0.621	2.203	2.030	1.956	1.304	1.332	1.292	89	84	43	45	42	6.83E-7	> 1.00E-4	> 1.00E-4
RXF 393	0.973	1.932	1.897	1.796	1.383	1.013	1.107	96	86	43	4	14	6.79E-7	> 1.00E-4	> 1.00E-4
SN12C	0.490	1.891	1.832	1.822	1.136	0.983	0.827	96	95	46	35	24	8.32E-7	> 1.00E-4	> 1.00E-4
TK-10	0.746	1.626	1.548	1.518	1.288	1.214	1.139	91	88	62	53	45	2.36E-5	> 1.00E-4	> 1.00E-4
UO-31	0.468	1.477	1.376	1.333	0.937	0.935	0.928	90	86	46	46	46	8.12E-7	> 1.00E-4	> 1.00E-4
Prostate Cancer															
PC-3	0.537	1.508	1.444	1.399	0.850	0.773	0.764	93	89	32	24	23	4.85E-7	> 1.00E-4	> 1.00E-4
DU-145	0.372	1.733	1.766	1.713	0.974	0.684	0.527	102	99	44	23	11	7.82E-7	> 1.00E-4	> 1.00E-4
Breast Cancer															
MCF7	0.365	2.060	1.951	1.839	0.680	0.664	0.642	94	87	19	18	16	3.47E-7	> 1.00E-4	> 1.00E-4
MDA-MB-231/ATCC	0.523	1.295	1.260	1.227	0.939	0.650	0.473	95	91	54	16	-10	1.27E-6	4.28E-5	> 1.00E-4
HS 578T	0.962	2.113	2.032	1.998	1.241	1.110	1.114	93	90	24	13	13	4.06E-7	> 1.00E-4	> 1.00E-4
BT-549	1.001	2.313	2.251	2.216	1.630	1.362	1.297	95	93	48	27	23	8.97E-7	> 1.00E-4	> 1.00E-4
T-47D	0.764	1.726	1.631	1.657	1.040	1.270	1.325	90	93	29	53	58		> 1.00E-4	> 1.00E-4
MDA-MB-468	0.937	2.171	2.082	1.932	1.247	1.263	1.236	93	81	25	26	24	3.56E-7	> 1.00E-4	> 1.00E-4

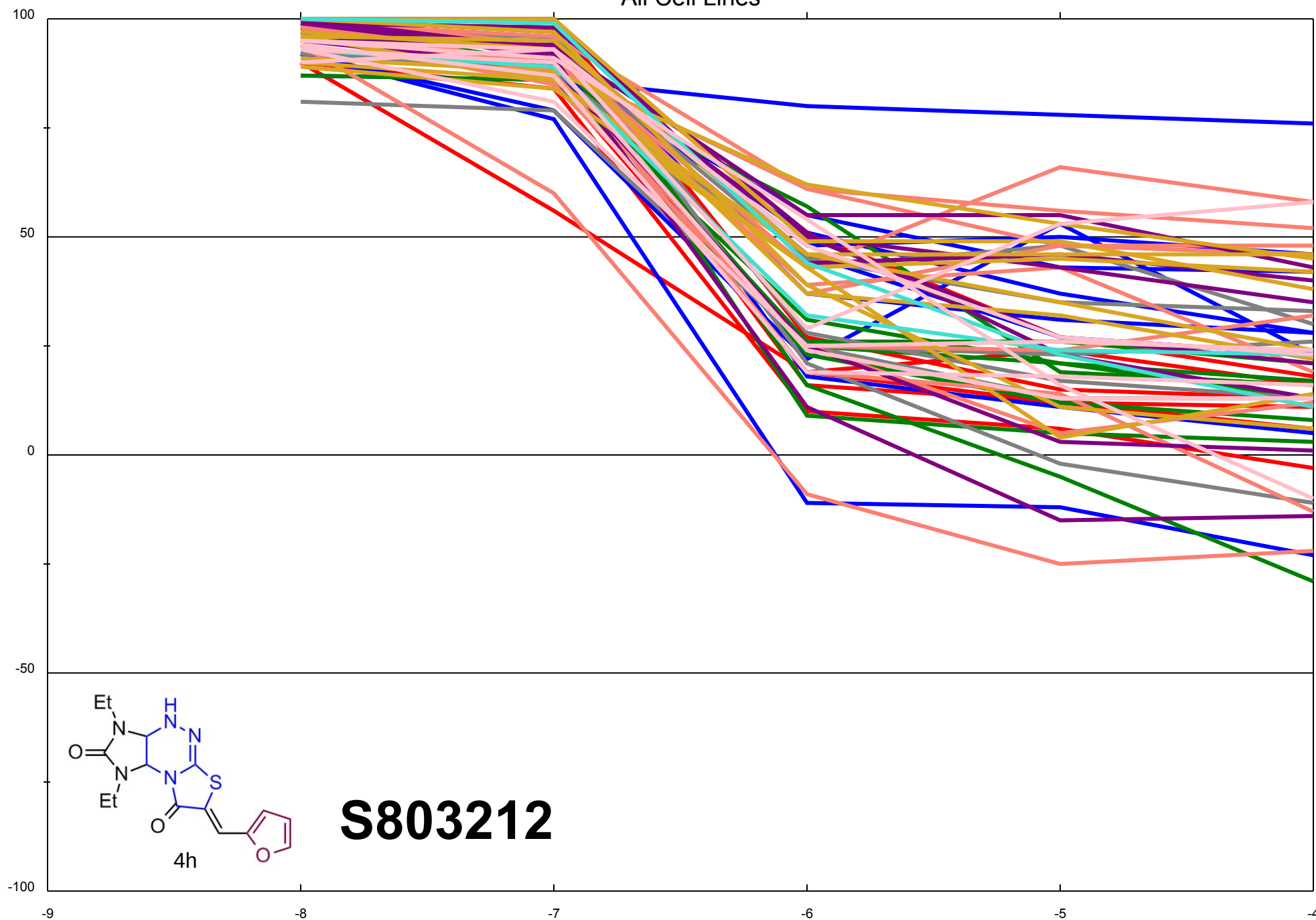
Dose Response Curves

Report Date:March 20, 2018

Test Date:February 26, 2018

All Cell Lines

Percentage Growth

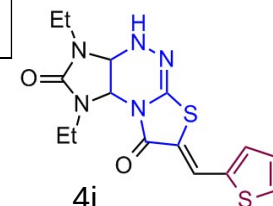
**S803212**

4h

Log₁₀ of Sample Concentration (Molar)

S9

National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results



NSC : D - 809964 / 1

Experiment ID : 1901NS52

Report Date : February 06, 2019

Test Date : January 14, 2019

COMI : IA-715

Stain Reagent : SRB Dual-Pass Related

Units : Molar

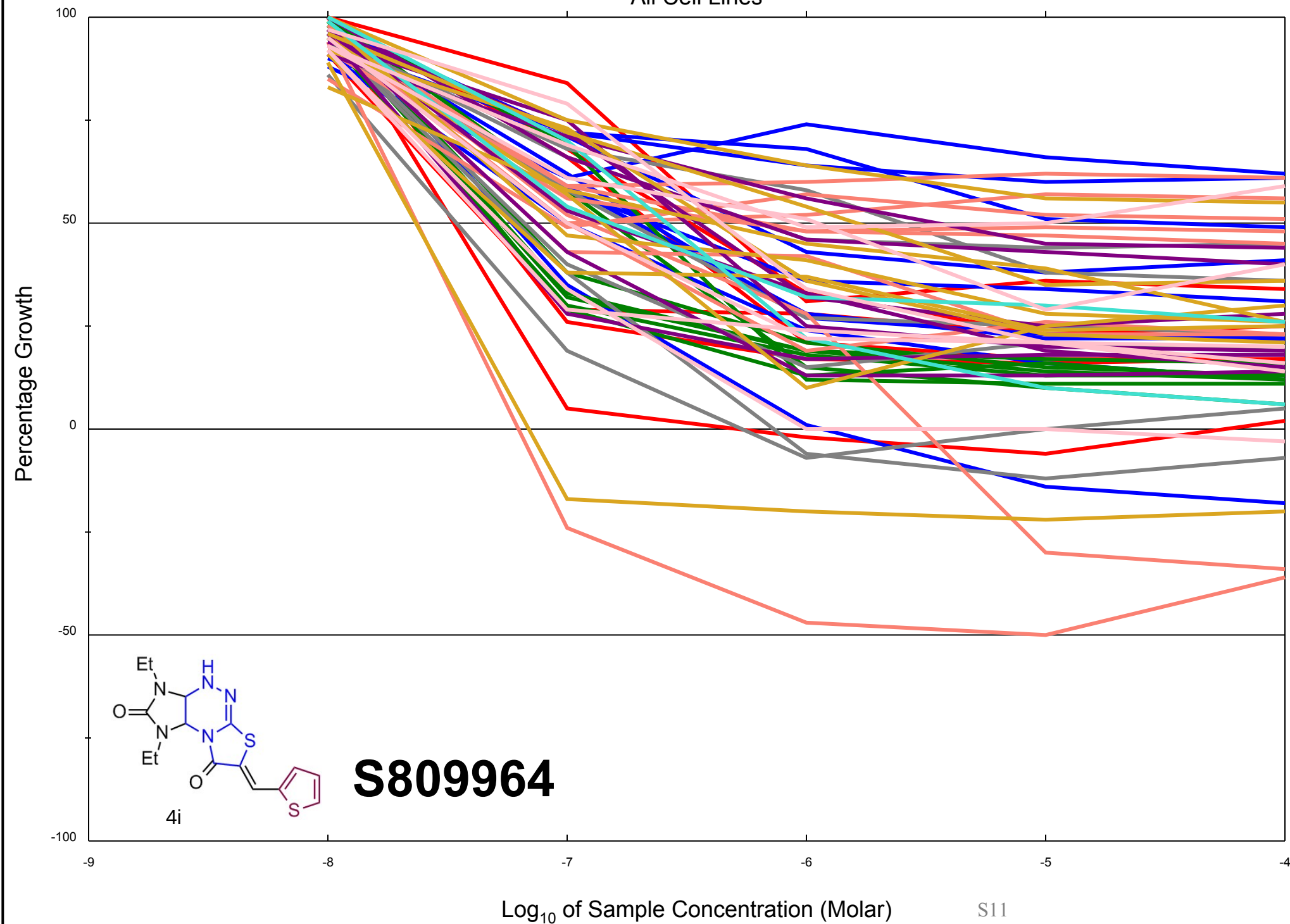
	Log10 Concentration														
	Time		Mean Optical Densities					Percent Growth							
Panel/Cell Line	Zero	Ctrl	-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0	GI50	TGI	LC50
Leukemia															
CCRF-CEM	0.437	2.512	2.561	1.798	0.863	0.798	0.780	102	66	21	17	17	2.22E-7	> 1.00E-4	> 1.00E-4
HL-60(TB)	0.908	3.089	3.149	1.028	0.894	0.857	0.957	103	5	-2	-6	2	3.49E-8	.	> 1.00E-4
K-562	0.163	1.957	2.062	0.634	0.469	0.444	0.460	106	26	17	16	17	5.03E-8	> 1.00E-4	> 1.00E-4
MOLT-4	0.709	3.005	3.027	2.270	1.464	1.230	1.286	101	68	33	23	25	3.25E-7	> 1.00E-4	> 1.00E-4
RPMI-8226	0.901	2.768	2.802	2.464	1.483	1.573	1.533	102	84	31	36	34	4.38E-7	> 1.00E-4	> 1.00E-4
SR	0.448	1.882	1.755	0.859	0.853	0.773	0.770	91	29	28	23	22	4.55E-8	> 1.00E-4	> 1.00E-4
Non-Small Cell Lung Cancer															
A549/ATCC	0.420	2.284	2.167	1.517	0.948	0.823	0.835	94	59	28	22	22	1.95E-7	> 1.00E-4	> 1.00E-4
EKVX	0.753	1.699	1.637	1.430	1.360	1.319	1.329	93	72	64	60	61	> 1.00E-4	> 1.00E-4	> 1.00E-4
HOP-62	0.758	2.606	2.537	1.832	1.433	1.388	1.339	96	58	36	34	31	2.37E-7	> 1.00E-4	> 1.00E-4
HOP-92	1.219	2.058	1.957	1.727	1.842	1.774	1.739	88	61	74	66	62	> 1.00E-4	> 1.00E-4	> 1.00E-4
NCI-H226	1.223	2.855	2.822	2.400	2.337	2.055	2.019	98	72	68	51	49	2.69E-5	> 1.00E-4	> 1.00E-4
NCI-H23	0.599	2.302	2.257	1.649	1.061	0.989	0.977	97	62	27	23	22	2.18E-7	> 1.00E-4	> 1.00E-4
NCI-H322M	0.663	1.945	1.816	1.570	1.217	1.151	1.195	90	71	43	38	41	5.66E-7	> 1.00E-4	> 1.00E-4
NCI-H460	0.429	2.853	2.897	1.276	0.461	0.371	0.354	102	35	1	-14	-18	5.95E-8	1.23E-6	> 1.00E-4
NCI-H522	0.888	2.562	2.419	1.729	1.286	1.157	1.089	91	50	24	16	12	1.02E-7	> 1.00E-4	> 1.00E-4
Colon Cancer															
COLO 205	0.484	2.032	2.093	1.382	0.719	0.641	0.584	104	58	15	10	6	1.54E-7	> 1.00E-4	> 1.00E-4
HCC-2998	0.731	2.780	2.782	2.145	0.984	0.967	0.955	100	69	12	11	11	2.16E-7	> 1.00E-4	> 1.00E-4
HCT-116	0.236	2.667	2.640	1.156	0.757	0.592	0.549	99	38	21	15	13	6.32E-8	> 1.00E-4	> 1.00E-4
HCT-15	0.249	1.774	1.739	0.759	0.537	0.460	0.436	98	33	19	14	12	5.52E-8	> 1.00E-4	> 1.00E-4
HT29	0.259	1.884	1.874	0.737	0.472	0.513	0.459	99	29	13	16	12	5.08E-8	> 1.00E-4	> 1.00E-4
KM12	0.581	2.735	2.627	1.235	0.960	0.871	0.852	95	30	18	13	13	4.96E-8	> 1.00E-4	> 1.00E-4
SW-620	0.450	1.897	1.853	0.915	0.725	0.702	0.682	97	32	19	17	16	5.30E-8	> 1.00E-4	> 1.00E-4
CNS Cancer															
SF-268	0.949	2.452	2.381	1.974	1.814	1.515	1.487	95	68	58	38	36	2.40E-6	> 1.00E-4	> 1.00E-4
SF-295	0.933	2.977	2.903	1.744	1.232	1.354	1.328	96	40	15	21	19	6.57E-8	> 1.00E-4	> 1.00E-4
SF-539	0.585	2.058	1.981	1.144	0.550	0.515	0.543	95	38	-6	-12	-7	6.14E-8	7.31E-7	> 1.00E-4
SNB-19	0.780	2.499	2.421	1.917	1.567	1.539	1.556	95	66	46	44	45	6.21E-7	> 1.00E-4	> 1.00E-4
SNB-75	1.190	1.971	1.858	1.335	1.104	1.179	1.229	86	19	-7	.	5	3.39E-8	.	> 1.00E-4
U251	0.361	1.912	1.845	1.254	0.779	0.744	0.716	96	58	27	25	23	1.77E-7	> 1.00E-4	> 1.00E-4
Melanoma															
LOX IMVI	0.445	3.084	3.006	1.576	1.550	1.056	1.062	97	43	42	23	23	7.38E-8	> 1.00E-4	> 1.00E-4
MALME-3M	0.876	1.958	1.797	1.406	1.498	1.434	1.432	85	49	57	52	51	.	> 1.00E-4	> 1.00E-4
M14	0.547	2.562	2.472	1.547	0.938	1.075	1.006	96	50	19	26	23	9.81E-8	> 1.00E-4	> 1.00E-4
MDA-MB-435	0.766	2.910	2.772	0.580	0.408	0.386	0.493	94	-24	-47	-50	-36	2.34E-8	6.22E-8	> 1.00E-4
SK-MEL-2	1.055	2.700	2.569	1.977	1.843	1.824	1.796	92	56	48	47	45	5.55E-7	> 1.00E-4	> 1.00E-4
SK-MEL-28	0.812	2.571	2.516	1.852	1.654	1.673	1.651	97	59	48	49	48	6.47E-7	> 1.00E-4	> 1.00E-4
SK-MEL-5	0.982	3.220	3.177	2.140	1.605	0.690	0.644	98	52	28	-30	-34	1.18E-7	3.04E-6	> 1.00E-4
UACC-257	1.152	2.741	2.623	2.096	2.104	2.145	2.115	93	59	60	62	61	> 1.00E-4	> 1.00E-4	> 1.00E-4
UACC-62	1.153	3.059	2.965	2.112	2.146	2.236	2.211	95	50	52	57	56	> 1.00E-4	> 1.00E-4	> 1.00E-4
Ovarian Cancer															
IGROV1	0.550	2.200	2.143	1.417	1.101	0.870	0.795	97	53	33	19	15	1.36E-7	> 1.00E-4	> 1.00E-4
OVCAR-3	0.634	2.152	2.088	1.063	0.895	0.901	0.907	96	28	17	18	18	4.76E-8	> 1.00E-4	> 1.00E-4
OVCAR-4	0.694	1.512	1.440	1.272	1.154	1.060	1.051	91	71	56	45	44	3.47E-6	> 1.00E-4	> 1.00E-4
OVCAR-5	0.617	1.701	1.666	1.399	0.966	0.891	0.925	97	72	32	25	28	3.58E-7	> 1.00E-4	> 1.00E-4
OVCAR-8	0.474	2.323	2.213	1.865	0.932	0.841	0.832	94	75	25	20	19	3.16E-7	> 1.00E-4	> 1.00E-4
NCI/ADR-RES	0.543	2.008	1.968	1.175	0.740	0.734	0.754	97	43	13	13	14	7.47E-8	> 1.00E-4	> 1.00E-4
SK-OV-3	0.914	2.090	2.129	1.685	1.460	1.419	1.387	103	66	46	43	40	6.49E-7	> 1.00E-4	> 1.00E-4
Renal Cancer															
786-0	0.836	3.041	2.958	2.414	2.030	1.610	1.621	96	72	54	35	36	1.65E-6	> 1.00E-4	> 1.00E-4
A498	2.033	2.601	2.539	1.686	1.628	1.584	1.630	89	-17	-20	-22	-20	2.33E-8	6.90E-8	> 1.00E-4
ACHN	0.450	1.944	1.922	1.151	1.061	0.866	0.844	99	47	41	28	26	8.70E-8	> 1.00E-4	> 1.00E-4
CAKI-1	0.880	2.486	2.346	1.494	1.473	1.266	1.285	91	38	37	24	25	5.99E-8	> 1.00E-4	> 1.00E-4
RXF 393	0.904	1.618	1.579	1.310	0.977	1.085	1.118	95	57	10	25	30	1.41E-7	> 1.00E-4	> 1.00E-4
SN12C	0.660	2.789	2.626	2.218	1.420	1.158	1.117	92	73	36	23	21	4.15E-7	> 1.00E-4	> 1.00E-4
TK-10	0.576	2.004	2.024	1.645	1.492	1.378	1.354	101	75	64	56	55	> 1.00E-4	> 1.00E-4	> 1.00E-4
UO-31	1.055	2.395	2.161	1.838	1.664	1.584	1.398	83	58	45	39	26	4.47E-7	> 1.00E-4	> 1.00E-4
Prostate Cancer															
PC-3	0.610	2.654	2.630	1.709	1.270	1.219	1.147	99	54	32	30	26	1.49E-7	> 1.00E-4	> 1.00E-4
DU-145	0.500	1.970	1.995	1.523	0.817	0.646	0.592	102	70	22	10	6	2.56E-7	> 1.00E-4	> 1.00E-4
Breast Cancer															
MCF7	0.494	2.603	2.433	1.095	1.000	0.927	0.909	92	29	24	21	20	4.58E-8	> 1.00E-4	> 1.00E-4
MDA-MB-231/ATCC	0.676	1.699	1.673	1.484	1.027	0.888	0.835	97	79	34	21	16	4.46E-7	> 1.00E-4	> 1.00E-4
HS 578T	1.244	2.168	2.095	1.558	1.237	1.237	1.209	92	34	.	.	-3	5.30E-8	9.61E-7	> 1.00E-4
BT-549	1.117	2.375	2.292	1.881	1.753	1.488	1.618	93	61	51	29	40	1.06E-6	> 1.00E-4	> 1.00E-4
T-47D	0.804	1.993	1.909	1.628	1.392	1.398	1.500	93	69	49	50	59	.	> 1.00E-4	> 1.00E-4
MDA-MB-468	0.998	1.683	1.646	1.343	1.147	1.145	1.097	95	50	22	21	14	1.03E-7	> 1.00E-4	> 1.00E-4

Dose Response Curves

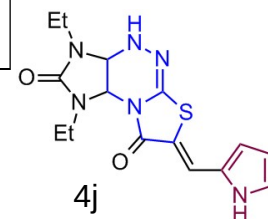
Report Date:February 06, 2019

Test Date:January 14, 2019

All Cell Lines



National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results



NSC : D - 809946 / 1

Experiment ID : 1812NS43

Report Date : January 09, 2019

Test Date : December 17, 2018

COMI : IA661

Stain Reagent : SRB Dual-Pass Related

Units : Molar

Panel/Cell Line	Time	Log10 Concentration												GI50	TGI	LC50
		Zero	Ctrl	Mean Optical Densities					Percent Growth							
				-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0			
Leukemia																
CCRF-CEM	0.328	1.814	1.865	1.749	0.480	0.392	0.370	103	96	10	4	3	3.42E-7	> 1.00E-4	> 1.00E-4	
HL-60(TB)	1.047	3.394	3.342	3.232	0.732	0.450	0.439	98	93	-30	-57	-58	2.24E-7	5.70E-7	5.49E-6	
K-562	0.285	2.557	2.675	1.798	0.453	0.359	0.359	105	67	7	3	3	1.91E-7	> 1.00E-4	> 1.00E-4	
MOLT-4	0.625	2.682	2.738	2.689	1.074	0.789	0.662	103	100	22	8	2	4.38E-7	> 1.00E-4	> 1.00E-4	
RPMI-8226	0.725	2.297	2.261	2.171	1.002	0.885	0.774	98	92	18	10	3	3.67E-7	> 1.00E-4	> 1.00E-4	
SR	0.400	1.132	1.107	0.746	0.450	0.419	0.348	97	47	7	3	-13	8.78E-8	1.46E-5	> 1.00E-4	
Non-Small Cell Lung Cancer																
A549/ATCC	0.310	1.821	1.647	1.374	0.802	0.604	0.500	89	70	33	19	13	3.46E-7	> 1.00E-4	> 1.00E-4	
EKVX	0.678	1.954	1.936	1.818	1.326	1.104	1.120	99	89	51	33	35	1.10E-6	> 1.00E-4	> 1.00E-4	
HOP-62	0.665	1.923	1.894	1.805	1.083	1.040	0.953	98	91	33	30	23	5.10E-7	> 1.00E-4	> 1.00E-4	
HOP-92	0.960	1.724	1.608	1.459	1.338	1.400	1.217	85	65	49	58	34		> 1.00E-4	> 1.00E-4	
NCI-H226	0.875	2.102	2.035	2.025	1.641	1.670	1.564	95	94	62	65	56	> 1.00E-4	> 1.00E-4	> 1.00E-4	
NCI-H23	0.569	1.895	1.871	1.759	1.103	0.991	0.913	98	90	40	32	26	6.36E-7	> 1.00E-4	> 1.00E-4	
NCI-H322M	0.808	2.076	1.963	1.925	1.373	1.376	1.321	91	88	45	45	40	7.49E-7	> 1.00E-4	> 1.00E-4	
NCI-H460	0.185	1.821	1.820	1.783	0.324	0.232	0.169	100	98	8	3	-9	3.42E-7	1.74E-5	> 1.00E-4	
NCI-H522	0.757	2.260	2.083	1.846	0.688	0.449	0.308	88	72	-9	-41	-59	1.88E-7	7.72E-7	3.16E-5	
Colon Cancer																
COLO 205	0.396	1.219	1.175	1.180	0.494	0.262	0.218	95	95	12	-34	-45	3.49E-7	1.82E-6	> 1.00E-4	
HCC-2998	0.868	2.689	2.653	2.469	1.912	1.054	1.038	98	88	57	10	9	1.43E-6	> 1.00E-4	> 1.00E-4	
HCT-116	0.162	1.787	1.757	1.677	0.516	0.361	0.220	98	93	22	12	4	4.03E-7	> 1.00E-4	> 1.00E-4	
HCT-15	0.291	1.574	1.496	1.326	0.604	0.479	0.396	94	81	24	15	8	3.51E-7	> 1.00E-4	> 1.00E-4	
HT29	0.193	1.425	1.422	1.365	0.192	0.160	0.132	100	95		-17	-32	2.95E-7	9.82E-7	> 1.00E-4	
KM12	0.396	1.907	1.760	1.526	0.566	0.501	0.334	90	75	11	7	-16	2.45E-7	2.03E-5	> 1.00E-4	
SW-620	0.248	1.812	1.768	1.533	0.449	0.521	0.470	97	82	13	17	14	2.91E-7	> 1.00E-4	> 1.00E-4	
CNS Cancer																
SF-268	0.567	2.023	1.975	1.903	1.115	1.065	0.859	97	92	38	34	20	5.90E-7	> 1.00E-4	> 1.00E-4	
SF-295	1.110	2.969	2.866	2.759	1.489	1.122	1.083	94	89	20	1	-2	3.69E-7	1.62E-5	> 1.00E-4	
SF-539	1.011	2.477	2.368	2.182	0.765	0.585	0.667	93	80	-24	-42	-34	1.93E-7	5.83E-7	> 1.00E-4	
SNB-19	0.635	2.168	2.079	2.011	1.225	1.105	1.081	94	90	38	31	29	5.96E-7	> 1.00E-4	> 1.00E-4	
SNB-75	1.546	2.366	2.178	2.050	1.273	0.971	1.132	77	61	-18	-37	-27	1.40E-7	5.98E-7	> 1.00E-4	
U251	0.296	1.570	1.455	1.417	0.619	0.461	0.454	91	88	25	13	12	4.04E-7	> 1.00E-4	> 1.00E-4	
Melanoma																
LOX IMVI	0.431	2.941	2.857	2.664	1.367	1.321	0.942	97	89	37	35	20	5.67E-7	> 1.00E-4	> 1.00E-4	
MALME-3M	0.790	1.824	1.694	1.530	1.211	1.273	1.236	87	72	41	47	43	4.99E-7	> 1.00E-4	> 1.00E-4	
M14	0.457	2.097	2.069	1.838	0.788	0.539	0.535	98	84	20	5	5	3.42E-7	> 1.00E-4	> 1.00E-4	
MDA-MB-435	0.587	2.489	2.438	1.474	0.352	0.332	0.392	97	47	-40	-43	-33	8.57E-8	3.45E-7	> 1.00E-4	
SK-MEL-2	0.834	1.971	1.903	1.853	0.998	0.989	0.844	94	90	14	14	1	3.37E-7	> 1.00E-4	> 1.00E-4	
SK-MEL-28	0.683	2.003	2.039	1.866	1.352	1.311	1.264	103	90	51	48	44	1.62E-6	> 1.00E-4	> 1.00E-4	
SK-MEL-5	0.792	2.648	2.583	2.287	1.207	1.143	0.839	96	81	22	19	3	3.35E-7	> 1.00E-4	> 1.00E-4	
UACC-257	0.742	1.949	1.755	1.706	1.192	1.403	1.285	84	80	37	55	45		> 1.00E-4	> 1.00E-4	
UACC-62	0.869	2.821	2.723	2.539	1.493	1.334	1.412	95	86	32	24	28	4.60E-7	> 1.00E-4	> 1.00E-4	
Ovarian Cancer																
IGROV1	0.811	2.513	2.421	2.354	1.557	1.234	1.050	95	91	44	25	14	7.38E-7	> 1.00E-4	> 1.00E-4	
OVCAR-3	0.328	1.187	1.228	1.097	0.296	0.229	0.228	105	89	-10	-30	-31	2.50E-7	7.97E-7	> 1.00E-4	
OVCAR-4	0.653	1.491	1.476	1.407	1.047	1.039	0.930	98	90	47	46	33	8.50E-7	> 1.00E-4	> 1.00E-4	
OVCAR-5	0.629	1.380	1.347	1.324	1.038	0.876	0.818	96	93	54	33	25	1.60E-6	> 1.00E-4	> 1.00E-4	
OVCAR-8	0.439	1.782	1.747	1.707	0.896	0.588	0.447	97	94	34	11	1	5.44E-7	> 1.00E-4	> 1.00E-4	
NCI/ADR-RES	0.650	2.031	1.979	1.855	0.971	0.806	0.828	96	87	23	11	13	3.81E-7	> 1.00E-4	> 1.00E-4	
SK-OV-3	0.776	1.708	1.634	1.501	0.959	0.906	0.826	92	78	20	14	5	3.01E-7	> 1.00E-4	> 1.00E-4	
Renal Cancer																
786-0	0.617	2.554	2.381	2.250	1.425	1.455	1.077	91	84	42	43	24	6.39E-7	> 1.00E-4	> 1.00E-4	
A498	1.583	2.267	2.088	1.929	1.376	1.266	1.214	74	51	-13	-20	-23	1.02E-7	6.22E-7	> 1.00E-4	
ACHN	0.297	1.120	1.112	1.068	0.537	0.567	0.495	99	94	29	33	24	4.75E-7	> 1.00E-4	> 1.00E-4	
CAKI-1	1.018	2.674	2.458	2.063	1.510	1.567	1.459	87	63	30	33	27	2.47E-7	> 1.00E-4	> 1.00E-4	
RXF 393	1.326	1.974	1.938	1.810	1.416	1.303	1.330	94	75	14	-2	1	2.54E-7		> 1.00E-4	
SN12C	0.728	2.791	2.738	2.675	1.653	1.472	1.246	97	94	45	36	25	7.86E-7	> 1.00E-4	> 1.00E-4	
TK-10	0.824	1.954	1.813	1.845	1.394	1.425	1.326	88	90	50	53	44	2.28E-5	> 1.00E-4	> 1.00E-4	
UO-31	0.924	2.124	1.881	1.844	1.424	1.301	1.255	80	77	42	31	28	5.78E-7	> 1.00E-4	> 1.00E-4	
Prostate Cancer																
PC-3	0.455	1.955	1.945	1.753	0.814	0.789	0.739	99	87	24	22	19	3.83E-7	> 1.00E-4	> 1.00E-4	
DU-145	0.363	1.609	1.616	1.533	0.636	0.498	0.394	101	94	22	11	2	4.07E-7	> 1.00E-4	> 1.00E-4	
Breast Cancer																
MCF7	0.394	1.980	1.865	1.568	0.664	0.688	0.550	93	74	17	19	10	2.63E-7	> 1.00E-4	> 1.00E-4	
MDA-MB-231/ATCC	0.745	1.705	1.709	1.622	1.343	1.100	0.822	100	91	62	37	8	3.05E-6	> 1.00E-4	> 1.00E-4	
HS 578T	0.921	1.903	1.868	1.777	0.937	0.967	0.981	96	87	2	5	6	2.72E-7	> 1.00E-4	> 1.00E-4	
BT-549	1.385	2.760	2.721	2.581	2.076	1.985	1.991	97	87	50	44	44	1.09E-6	> 1.00E-4	> 1.00E-4	
T-47D	0.652	1.352	1.316	1.116	0.781	0.737	0.705	95	66	18	12	8	2.19E-7	> 1.00E-4	> 1.00E-4	
MDA-MB-468	0.819	1.791	1.715	1.508	0.946	0.985	0.976	92	71	13	17	16	2.30E-7	> 1.00E-4	> 1.00E-4	

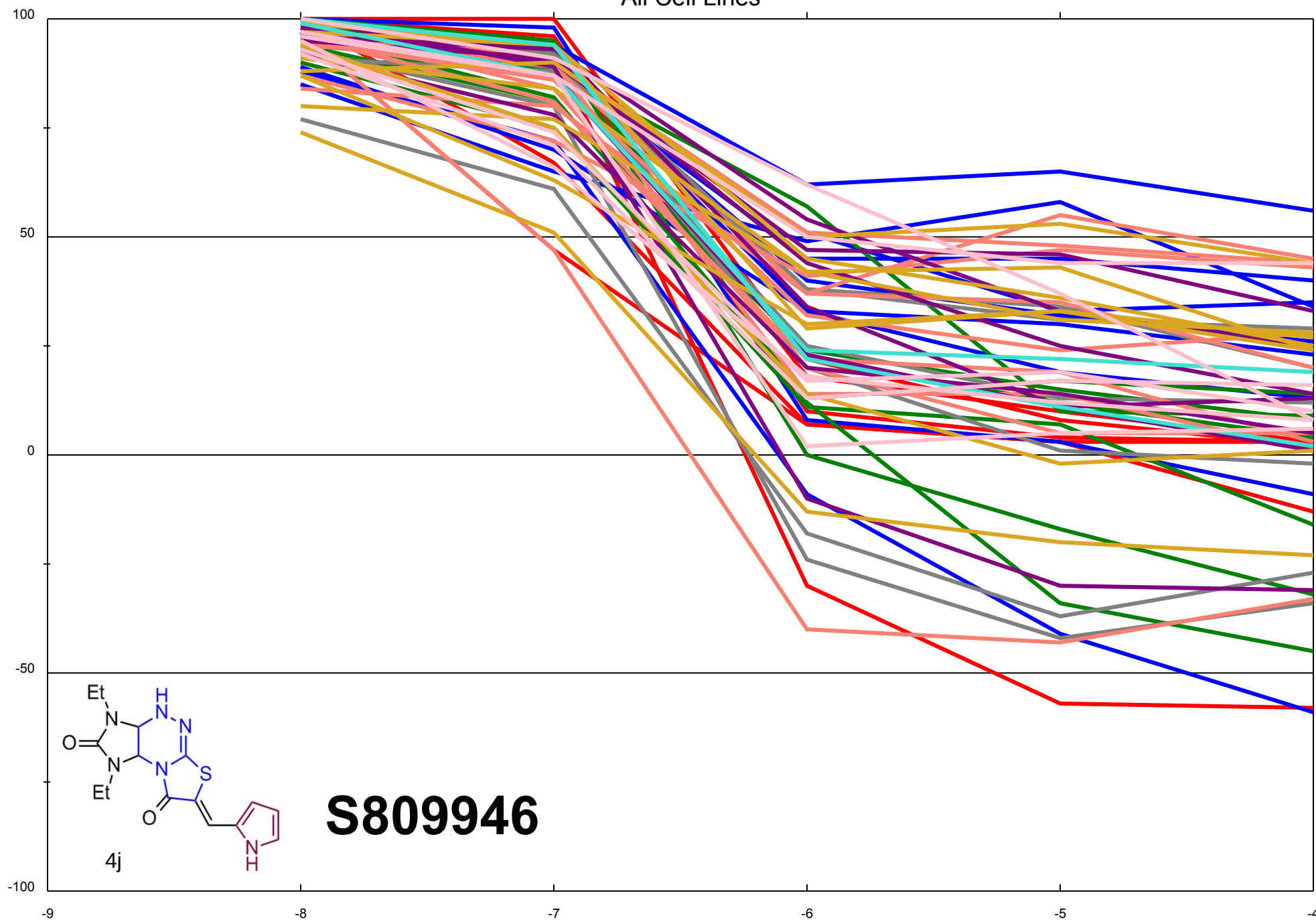
Dose Response Curves

Report Date:January 09, 2019

Test Date:December 17, 2018

All Cell Lines

Percentage Growth

**S809946**Log₁₀ of Sample Concentration (Molar)

S13

National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results

NSC : D - 809948 / 1

Report Date : January 09, 2019

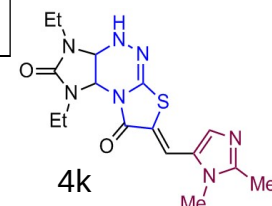
COMI : IA704

Experiment ID : 1812NS43

Test Date : December 17, 2018

Stain Reagent : SRB Dual-Pass Related

Units : Molar



	Log10 Concentration															
	Time	Mean Optical Densities							Percent Growth							
Panel/Cell Line	Zero	Ctrl	-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0	GI50	TGI	LC50	
Leukemia																
CCRF-CEM	0.328	1.881	1.880	1.905	1.584	0.493	0.412	100	102	81	11	5	2.75E-6	> 1.00E-4	> 1.00E-4	
HL-60(TB)	1.047	3.386	3.303	3.335	2.819	0.531	0.476	96	98	76	-49	-55	1.61E-6	4.03E-6	1.34E-5	
K-562	0.285	2.575	2.422	2.528	1.129	0.402	0.396	93	98	37	5	5	6.10E-7	> 1.00E-4	> 1.00E-4	
MOLT-4	0.625	2.627	2.617	2.744	2.357	0.926	0.792	99	106	87	15	8	3.24E-6	> 1.00E-4	> 1.00E-4	
RPMI-8226	0.725	2.317	2.225	2.285	2.112	1.018	0.857	94	98	87	18	8	3.47E-6	> 1.00E-4	> 1.00E-4	
SR	0.400	1.104	1.025	0.997	0.542	0.420	0.371	89	85	20	3	-7	3.46E-7	1.91E-5	> 1.00E-4	
Non-Small Cell Lung Cancer																
A549/ATCC	0.310	1.853	1.773	1.892	1.723	0.656	0.511	95	102	92	22	13	3.99E-6	> 1.00E-4	> 1.00E-4	
EKVX	0.678	1.847	1.803	1.846	1.681	0.937	0.998	96	100	86	22	27	3.65E-6	> 1.00E-4	> 1.00E-4	
HOP-62	0.665	2.138	2.122	2.073	1.715	0.955	0.856	99	96	71	20	13	2.59E-6	> 1.00E-4	> 1.00E-4	
HOP-92	0.960	1.581	1.462	1.470	1.421	1.202	0.954	81	82	74	39	.	4.85E-6	9.61E-5	> 1.00E-4	
NCI-H226	0.875	2.119	2.008	2.054	1.919	1.511	1.607	91	95	84	51	59	> 1.00E-4	> 1.00E-4	> 1.00E-4	
NCI-H23	0.569	1.923	1.908	1.908	1.638	0.855	0.712	99	99	79	21	11	3.17E-6	> 1.00E-4	> 1.00E-4	
NCI-H322M	0.808	2.069	1.948	1.988	1.944	1.272	1.119	90	94	90	37	25	5.65E-6	> 1.00E-4	> 1.00E-4	
NCI-H460	0.185	1.868	1.862	1.958	1.540	0.336	0.228	100	105	81	9	3	2.67E-6	> 1.00E-4	> 1.00E-4	
NCI-H522	0.757	2.304	2.052	2.101	1.719	0.490	0.403	84	87	62	-35	-47	1.33E-6	4.34E-6	> 1.00E-4	
Colon Cancer																
COLO 205	0.396	1.259	1.181	1.223	1.020	0.267	0.251	91	96	72	-33	-37	1.63E-6	4.88E-6	> 1.00E-4	
HCC-2998	0.868	2.692	2.512	2.594	2.380	0.961	0.636	90	95	83	5	-27	2.65E-6	1.45E-5	> 1.00E-4	
HCT-116	0.162	1.740	1.664	1.724	1.302	0.391	0.241	95	99	72	14	5	2.43E-6	> 1.00E-4	> 1.00E-4	
HCT-15	0.291	1.561	1.502	1.529	1.300	0.600	0.436	95	97	79	24	11	3.42E-6	> 1.00E-4	> 1.00E-4	
HT29	0.193	1.507	1.454	1.531	1.130	0.190	0.212	96	102	71	-2	1	1.96E-6	.	> 1.00E-4	
KM12	0.396	2.080	1.942	1.909	1.298	0.612	0.537	92	90	54	13	8	1.22E-6	> 1.00E-4	> 1.00E-4	
SW-620	0.248	1.919	1.868	1.859	1.297	0.593	0.457	97	96	63	21	13	2.01E-6	> 1.00E-4	> 1.00E-4	
CNS Cancer																
SF-268	0.567	2.093	1.964	2.051	1.792	1.037	0.780	92	97	80	31	14	4.09E-6	> 1.00E-4	> 1.00E-4	
SF-295	1.110	2.972	2.913	2.973	2.120	1.189	1.362	97	100	54	4	14	1.21E-6	> 1.00E-4	> 1.00E-4	
SF-539	1.011	2.536	2.328	2.368	2.187	0.701	0.754	86	89	77	-31	-25	1.78E-6	5.19E-6	> 1.00E-4	
SNB-19	0.635	1.958	1.860	1.930	1.736	0.998	0.964	93	98	83	27	25	3.94E-6	> 1.00E-4	> 1.00E-4	
SNB-75	1.546	2.296	2.036	2.081	1.768	1.151	1.271	65	71	30	-26	-18	3.24E-7	3.44E-6	> 1.00E-4	
U251	0.296	1.540	1.459	1.481	1.312	0.439	0.403	93	95	82	11	9	2.83E-6	> 1.00E-4	> 1.00E-4	
Melanoma																
LOX IMVI	0.431	2.816	2.711	2.699	2.287	1.261	0.840	96	95	78	35	17	4.43E-6	> 1.00E-4	> 1.00E-4	
MALME-3M	0.790	1.731	1.565	1.616	1.397	1.107	0.887	82	88	65	34	10	2.96E-6	> 1.00E-4	> 1.00E-4	
M14	0.457	1.969	1.911	1.952	1.362	0.438	0.462	96	99	60	-4	.	1.43E-6	.	> 1.00E-4	
MDA-MB-435	0.587	2.486	2.401	2.373	0.723	0.318	0.576	95	94	7	-46	-2	3.21E-7	1.36E-6	> 1.00E-4	
SK-MEL-2	0.834	1.979	1.937	1.983	1.609	0.850	0.638	96	100	68	1	-24	1.84E-6	1.13E-5	> 1.00E-4	
SK-MEL-28	0.683	2.034	1.947	2.073	1.647	1.244	0.749	94	103	71	42	5	5.19E-6	> 1.00E-4	> 1.00E-4	
SK-MEL-5	0.792	2.711	2.542	2.652	1.829	0.863	0.152	91	97	54	4	-81	1.20E-6	1.11E-5	4.31E-5	
UACC-257	0.742	1.972	1.923	1.930	1.680	1.199	0.807	96	97	76	37	5	4.69E-6	> 1.00E-4	> 1.00E-4	
UACC-62	0.869	2.674	2.530	2.532	1.809	1.153	0.861	92	92	52	16	.	1.14E-6	8.80E-5	> 1.00E-4	
Ovarian Cancer																
IGROV1	0.811	2.531	2.376	2.443	2.209	1.369	1.043	91	95	81	32	13	4.37E-6	> 1.00E-4	> 1.00E-4	
OVCAR-3	0.328	1.180	1.165	1.180	0.629	0.227	0.234	98	100	35	-31	-29	5.93E-7	3.41E-6	> 1.00E-4	
OVCAR-4	0.653	1.526	1.452	1.489	1.326	0.915	0.877	92	96	77	30	26	3.76E-6	> 1.00E-4	> 1.00E-4	
OVCAR-5	0.629	1.402	1.311	1.365	1.290	0.806	0.738	88	95	85	23	14	3.68E-6	> 1.00E-4	> 1.00E-4	
OVCAR-8	0.439	1.837	1.818	1.851	1.717	0.632	0.495	99	101	91	14	4	3.41E-6	> 1.00E-4	> 1.00E-4	
NCI/ADR-RES	0.650	2.006	1.917	1.951	1.852	1.335	0.816	93	96	89	50	12	1.03E-5	> 1.00E-4	> 1.00E-4	
SK-OV-3	0.776	1.697	1.673	1.670	1.532	0.858	0.880	97	97	82	9	11	2.74E-6	> 1.00E-4	> 1.00E-4	
Renal Cancer																
786-0	0.617	2.435	2.271	2.272	2.304	1.350	0.838	91	91	93	40	12	6.54E-6	> 1.00E-4	> 1.00E-4	
A498	1.583	2.256	2.099	2.139	1.914	1.302	1.003	77	83	49	-18	-37	9.46E-7	5.43E-6	> 1.00E-4	
ACHN	0.297	1.162	1.083	1.174	1.076	0.628	0.601	91	101	90	38	35	5.94E-6	> 1.00E-4	> 1.00E-4	
CAKI-1	1.018	2.646	2.418	2.393	1.729	1.358	1.350	86	84	44	21	20	7.00E-7	> 1.00E-4	> 1.00E-4	
RXF 393	1.326	1.956	1.767	1.863	1.679	1.052	1.043	70	85	56	-21	-21	1.20E-6	5.38E-6	> 1.00E-4	
SN12C	0.728	2.645	2.555	2.623	2.401	1.329	0.937	95	99	87	31	11	4.64E-6	> 1.00E-4	> 1.00E-4	
TK-10	0.824	1.983	1.922	1.903	1.937	1.315	1.028	95	93	96	42	18	7.19E-6	> 1.00E-4	> 1.00E-4	
UO-31	0.924	2.032	1.877	1.880	1.779	1.349	1.298	86	86	77	38	34	5.01E-6	> 1.00E-4	> 1.00E-4	
Prostate Cancer																
PC-3	0.455	1.838	1.785	1.765	1.344	0.722	0.739	96	95	64	19	21	2.07E-6	> 1.00E-4	> 1.00E-4	
DU-145	0.363	1.569	1.525	1.569	1.317	0.440	0.408	96	100	79	6	4	2.51E-6	> 1.00E-4	> 1.00E-4	
Breast Cancer																
MCF7	0.394	1.883	1.733	1.799	1.003	0.652	0.555	90	94	41	17	11	6.76E-7	> 1.00E-4	> 1.00E-4	
MDA-MB-231/ATCC	0.745	1.626	1.592	1.526	1.378	0.894	0.621	96	89	72	17	-17	2.50E-6	3.19E-5	> 1.00E-4	
HS 578T	0.921	1.919	1.830	1.849	1.634	0.867	0.936	91	93	71	-6	2	1.89E-6	.	> 1.00E-4	
BT-549	1.385	2.711	2.597	2.553	2.387	1.786	1.367	91	88	76	30	-1	3.66E-6	9.09E-5	> 1.00E-4	
T-47D	0.652	1.463	1.351	1.334	1.365	0.914	0.942	86	84	88	32	36	4.81E-6	> 1.00E-4	> 1.00E-4	
MDA-MB-468	0.819	1.758	1.650	1.677	1.111	0.769	0.829	88	91	31	-6	1	4.85E-7	.	> 1.00E-4	

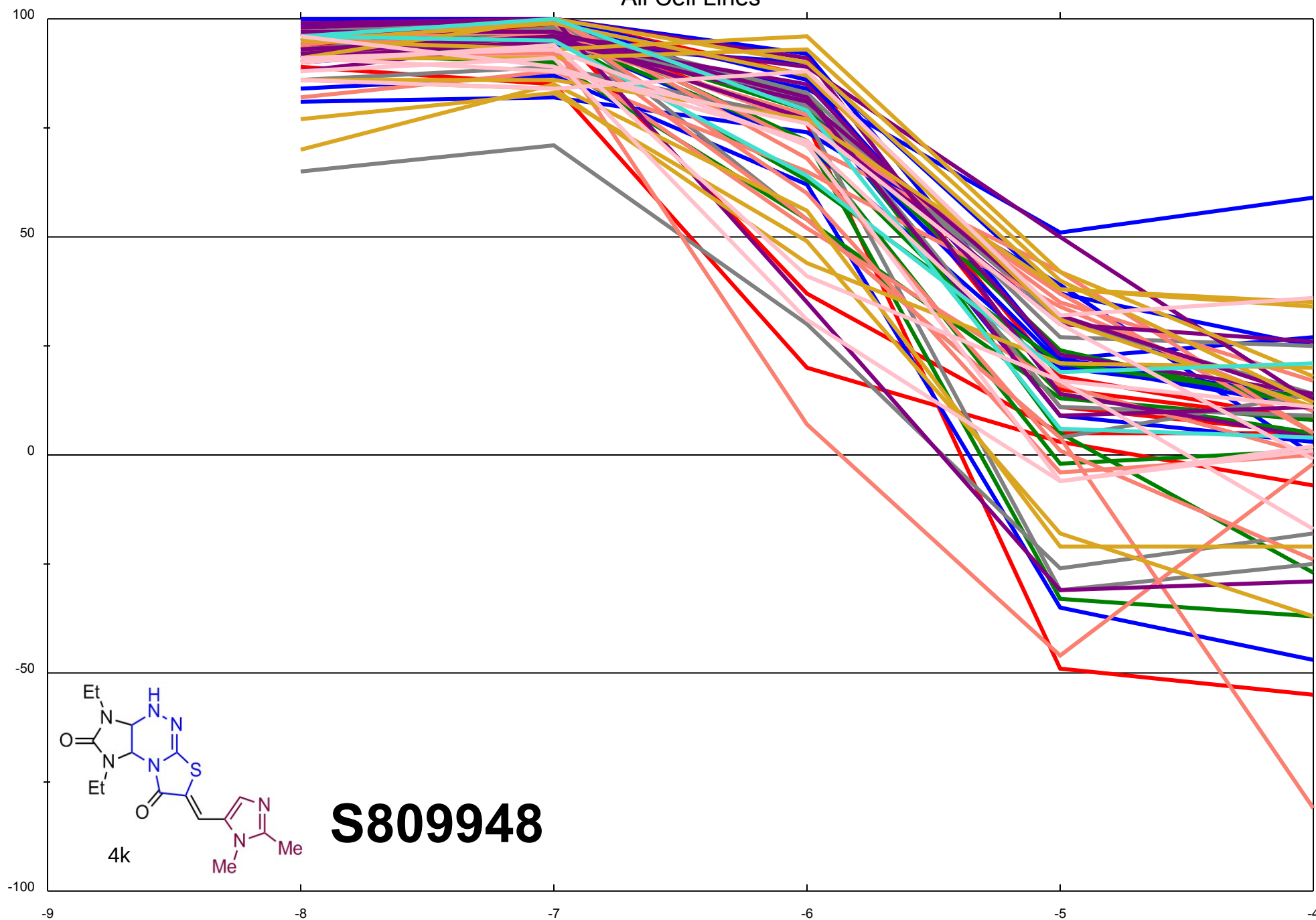
Dose Response Curves

Report Date:January 09, 2019

Test Date:December 17, 2018

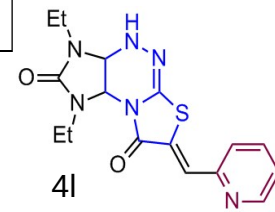
All Cell Lines

Percentage Growth

Log₁₀ of Sample Concentration (Molar)

S15

National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results



NSC : D - 818429 / 1

Experiment ID : 1911NS88

Report Date : December 26, 2019

Test Date : November 04, 2019

COMI : IA-850

Stain Reagent : SRB Dual-Pass Related

Units : Molar

Panel/Cell Line	Time Zero	Ctrl	Log10 Concentration										GI50	TGI	LC50
			Mean Optical Densities					Percent Growth							
			-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0			
Leukemia															
CCRF-CEM	0.560	2.545	2.460	2.526	1.761	0.642	0.570	96	99	60	4	1	1.53E-6	> 1.00E-4	> 1.00E-4
HL-60(TB)	0.917	3.300	3.259	3.278	1.577	0.696	0.599	98	99	28	-24	-35	4.87E-7	3.42E-6	> 1.00E-4
K-562	0.194	1.933	1.812	1.921	0.601	0.334	0.314	93	99	23	8	7	4.46E-7	> 1.00E-4	> 1.00E-4
MOLT-4	0.642	2.740	2.764	2.771	1.862	0.992	0.854	101	102	58	17	10	1.57E-6	> 1.00E-4	> 1.00E-4
RPMI-8226	0.911	2.406	2.297	2.355	1.867	0.975	0.940	93	97	64	4	2	1.71E-6	> 1.00E-4	> 1.00E-4
SR	0.388	2.214	2.122	2.094	0.889	0.598	0.559	95	93	27	11	9	4.55E-7	> 1.00E-4	> 1.00E-4
Non-Small Cell Lung Cancer															
A549/ATCC	0.458	2.623	2.401	2.493	1.826	0.966	0.939	90	94	63	23	22	2.15E-6	> 1.00E-4	> 1.00E-4
EKVX	0.823	2.316	2.152	2.244	2.010	1.331	1.421	89	95	79	34	40	4.45E-6	> 1.00E-4	> 1.00E-4
HOP-62	0.655	2.002	1.832	1.828	1.533	1.093	0.928	87	87	65	33	20	2.91E-6	> 1.00E-4	> 1.00E-4
HOP-92	1.228	1.813	1.731	1.766	1.586	1.412	1.361	86	92	61	31	23	2.37E-6	> 1.00E-4	> 1.00E-4
NCI-H226	1.361	2.496	2.403	2.494	2.225	1.618	1.533	92	100	76	23	15	3.07E-6	> 1.00E-4	> 1.00E-4
NCI-H23	0.582	1.843	1.778	1.861	1.537	0.980	0.927	95	101	76	32	27	3.82E-6	> 1.00E-4	> 1.00E-4
NCI-H322M	0.918	2.302	2.211	2.253	2.007	1.406	1.496	93	96	79	35	42	4.58E-6	> 1.00E-4	> 1.00E-4
NCI-H460	0.404	3.243	3.241	3.258	2.330	0.723	0.589	100	101	68	11	6	2.07E-6	> 1.00E-4	> 1.00E-4
NCI-H522	1.037	2.559	2.353	2.453	1.673	1.039	0.937	86	93	42	.	-10	6.90E-7	1.02E-5	> 1.00E-4
Colon Cancer															
COLO 205	0.437	1.764	1.687	1.706	1.145	0.455	0.351	94	96	53	1	-20	1.16E-6	1.16E-5	> 1.00E-4
HCC-2998	0.648	1.904	1.756	1.786	1.709	0.844	0.750	88	91	84	16	8	3.17E-6	> 1.00E-4	> 1.00E-4
HCT-116	0.285	2.443	2.351	2.436	1.267	0.653	0.442	96	100	45	17	7	8.25E-7	> 1.00E-4	> 1.00E-4
HCT-15	0.234	1.806	1.714	1.700	0.790	0.477	0.377	94	93	35	15	9	5.58E-7	> 1.00E-4	> 1.00E-4
HT29	0.226	1.685	1.714	1.712	0.804	0.354	0.334	102	102	40	9	7	6.81E-7	> 1.00E-4	> 1.00E-4
KM12	0.874	3.358	3.323	3.340	2.200	1.450	1.392	99	99	53	23	21	1.29E-6	> 1.00E-4	> 1.00E-4
SW-620	0.358	2.763	2.643	2.681	1.395	0.979	0.983	95	97	43	26	26	7.43E-7	> 1.00E-4	> 1.00E-4
CNS Cancer															
SF-268	1.102	2.838	2.698	2.710	2.411	2.185	1.958	92	93	75	62	49	8.85E-5	> 1.00E-4	> 1.00E-4
SF-295	1.271	3.302	3.223	3.294	2.775	1.650	1.657	96	100	74	19	19	2.72E-6	> 1.00E-4	> 1.00E-4
SF-539	0.781	2.482	2.393	2.467	1.945	0.720	0.571	95	99	68	-8	-27	1.74E-6	7.90E-6	> 1.00E-4
SNB-19	0.769	2.525	2.375	2.447	2.018	1.250	1.369	91	96	71	27	34	3.04E-6	> 1.00E-4	> 1.00E-4
U251	0.446	2.100	1.976	2.050	1.663	0.836	0.733	93	97	74	24	17	2.96E-6	> 1.00E-4	> 1.00E-4
Melanoma															
LOX IMVI	0.616	2.973	2.878	2.934	2.164	1.676	1.220	96	98	66	45	26	5.71E-6	> 1.00E-4	> 1.00E-4
MALME-3M	0.634	1.243	1.152	1.244	0.972	0.815	0.863	85	100	55	30	38	1.63E-6	> 1.00E-4	> 1.00E-4
M14	0.419	1.750	1.716	1.698	0.974	0.386	0.613	97	96	42	-8	15	7.04E-7	.	> 1.00E-4
MDA-MB-435	0.508	2.469	2.351	2.316	0.543	0.215	0.349	94	92	2	-58	-31	2.93E-7	1.07E-6	.
SK-MEL-2	1.085	2.944	2.822	2.914	2.290	1.636	1.605	93	98	65	30	28	2.64E-6	> 1.00E-4	> 1.00E-4
SK-MEL-28	0.703	1.954	1.914	1.905	1.486	1.260	1.303	97	96	63	44	48	4.95E-6	> 1.00E-4	> 1.00E-4
SK-MEL-5	1.246	3.246	3.207	3.258	2.509	1.835	1.558	98	101	63	29	16	2.46E-6	> 1.00E-4	> 1.00E-4
UACC-257	0.795	2.146	1.986	2.005	1.730	1.625	1.619	88	90	69	61	61	> 1.00E-4	> 1.00E-4	> 1.00E-4
UACC-62	0.953	2.820	2.746	2.796	1.808	1.441	1.581	96	99	46	26	34	8.33E-7	> 1.00E-4	> 1.00E-4
Ovarian Cancer															
IGROV1	0.474	2.077	2.016	2.057	1.455	0.869	0.701	96	99	61	25	14	2.02E-6	> 1.00E-4	> 1.00E-4
OVCAR-3	0.561	1.902	1.887	1.914	0.786	0.381	0.295	99	101	17	-32	-47	4.03E-7	2.20E-6	> 1.00E-4
OVCAR-4	1.073	2.011	1.974	1.983	1.892	1.575	1.601	96	97	87	54	56	> 1.00E-4	> 1.00E-4	> 1.00E-4
OVCAR-5	0.576	1.673	1.623	1.649	1.476	0.947	0.971	95	98	82	34	36	4.61E-6	> 1.00E-4	> 1.00E-4
OVCAR-8	0.563	2.683	2.546	2.660	2.310	1.165	0.965	94	99	82	28	19	3.98E-6	> 1.00E-4	> 1.00E-4
NCI/ADR-RES	0.593	2.039	1.927	2.053	1.309	0.674	0.656	92	101	49	6	4	9.77E-7	> 1.00E-4	> 1.00E-4
SK-OV-3	0.832	1.847	1.731	1.825	1.604	1.158	1.112	89	98	76	32	28	3.92E-6	> 1.00E-4	> 1.00E-4
Renal Cancer															
786-0	0.741	2.644	2.555	2.583	2.319	1.387	1.219	95	97	83	34	25	4.70E-6	> 1.00E-4	> 1.00E-4
A498	1.676	2.346	2.155	2.100	1.766	1.388	1.347	71	63	13	-17	-20	1.84E-7	2.74E-6	> 1.00E-4
ACHN	0.544	2.381	2.320	2.380	1.767	1.391	1.131	97	100	67	46	32	6.45E-6	> 1.00E-4	> 1.00E-4
CAKI-1	1.234	3.091	2.851	2.883	2.061	1.841	1.909	87	89	45	33	36	7.52E-7	> 1.00E-4	> 1.00E-4
RXF 393	0.955	1.882	1.819	1.825	1.605	0.753	0.706	93	94	70	-21	-26	1.66E-6	5.86E-6	> 1.00E-4
SN12C	0.566	2.192	2.032	2.168	1.888	1.184	1.048	90	99	81	38	30	5.29E-6	> 1.00E-4	> 1.00E-4
TK-10	1.066	1.968	1.787	1.825	1.873	1.603	1.462	80	84	89	60	44	4.07E-5	> 1.00E-4	> 1.00E-4
UO-31	1.009	2.287	2.088	2.112	1.792	1.433	1.371	84	86	61	33	28	2.51E-6	> 1.00E-4	> 1.00E-4
Prostate Cancer															
PC-3	0.532	1.531	1.476	1.475	1.159	0.654	0.661	94	94	63	12	13	1.79E-6	> 1.00E-4	> 1.00E-4
DU-145	0.477	2.094	2.032	2.099	1.700	0.609	0.562	96	100	76	8	5	2.40E-6	> 1.00E-4	> 1.00E-4
Breast Cancer															
MCF7	0.406	2.291	2.028	2.102	0.978	0.770	0.765	86	90	30	19	19	4.68E-7	> 1.00E-4	> 1.00E-4
MDA-MB-231/ATCC	0.812	2.168	2.113	2.159	1.760	1.316	1.138	96	99	70	37	24	4.05E-6	> 1.00E-4	> 1.00E-4
HS 578T	1.691	2.863	2.779	2.797	2.566	1.911	1.936	93	94	75	19	21	2.76E-6	> 1.00E-4	> 1.00E-4
BT-549	1.314	2.393	2.295	2.390	2.002	1.755	1.437	91	100	64	41	11	3.99E-6	> 1.00E-4	> 1.00E-4
T-47D	0.831	1.853	1.712	1.802	1.671	1.191	1.239	86	95	82	35	40	4.84E-6	> 1.00E-4	> 1.00E-4
MDA-MB-468	0.946	1.569	1.486	1.550	1.144	0.848	0.859	87	97	32	-10	-9	5.23E-7	5.67E-6	> 1.00E-4

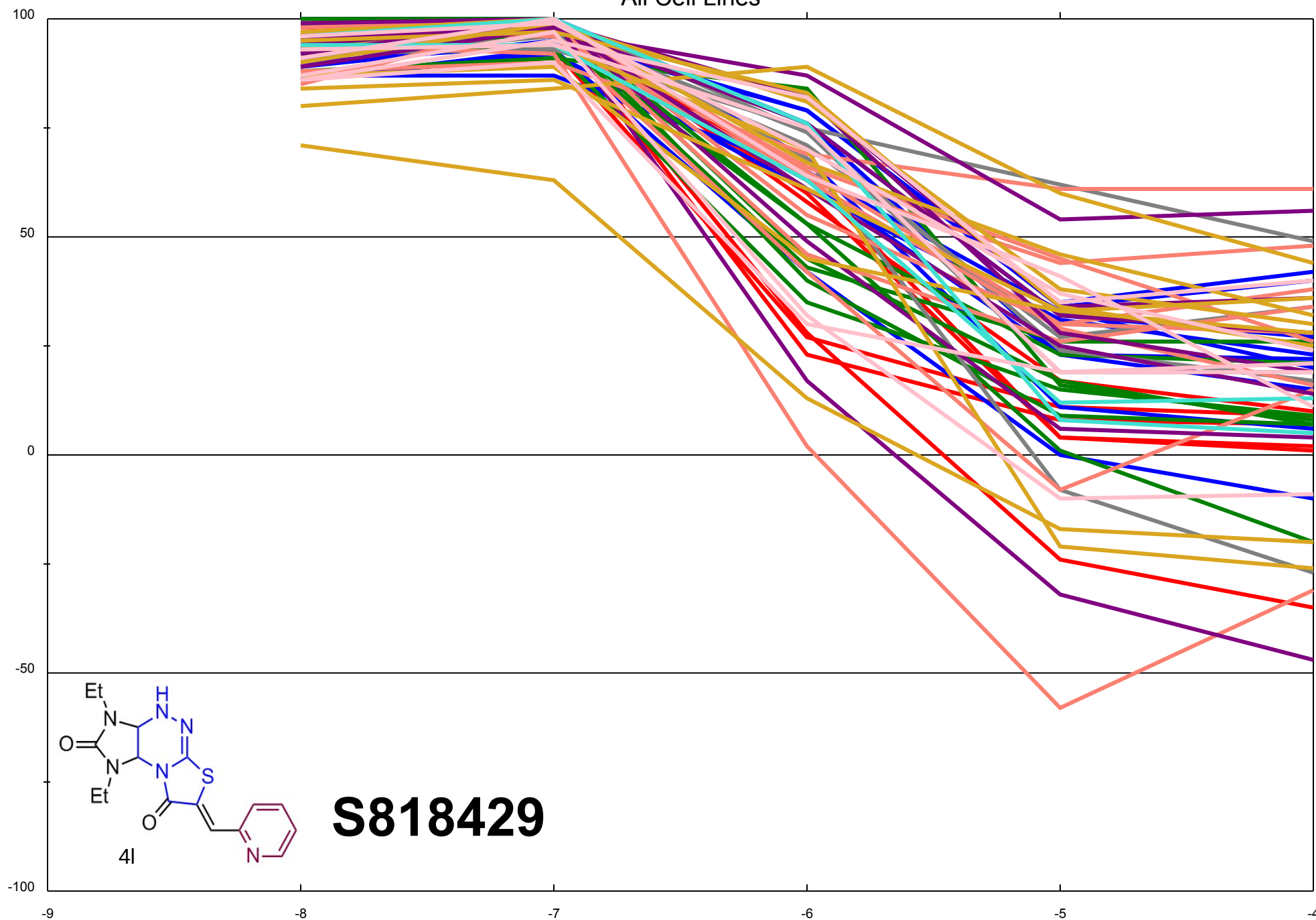
Dose Response Curves

Report Date:December 26, 2019

Test Date:November 04, 2019

All Cell Lines

Percentage Growth

**S818429**Log₁₀ of Sample Concentration (Molar)

S17

National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results

NSC : D - 819762 / 1

Report Date : January 26, 2020

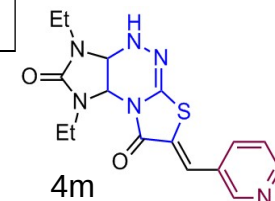
COMI : IA-851

Experiment ID : 1912NS94

Test Date : December 09, 2019

Stain Reagent : SRB Dual-Pass Related

Units : Molar



Panel/Cell Line	Time	Log10 Concentration												GI50	TGI	LC50
		Zero	Ctrl	Mean Optical Densities					Percent Growth							
				-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0			
Leukemia																
CCRF-CEM	0.432	2.726	2.761	2.670	0.939	0.691	0.721	102	98	22	11	13	4.27E-7	> 1.00E-4	> 1.00E-4	
HL-60(TB)	1.123	3.468	3.469	3.479	1.748	1.507	1.474	100	100	27	16	15	4.83E-7	> 1.00E-4	> 1.00E-4	
K-562	0.188	1.946	2.045	1.440	0.531	0.443	0.450	106	71	20	14	15	2.57E-7	> 1.00E-4	> 1.00E-4	
MOLT-4	0.541	2.735	2.807	2.805	1.337	1.045	1.031	103	103	36	23	22	6.23E-7	> 1.00E-4	> 1.00E-4	
SR	0.251	1.411	1.334	0.879	0.481	0.487	0.431	93	54	20	20	15	1.32E-7	> 1.00E-4	> 1.00E-4	
Non-Small Cell Lung Cancer																
A549/ATCC	0.437	2.348	2.283	2.331	1.185	0.986	0.861	97	99	39	29	22	6.59E-7	> 1.00E-4	> 1.00E-4	
EKVX	0.661	1.975	1.909	1.830	1.238	1.122	1.149	95	89	44	35	37	7.33E-7	> 1.00E-4	> 1.00E-4	
HOP-62	0.596	2.165	2.190	1.968	1.234	1.074	1.039	102	87	41	30	28	6.31E-7	> 1.00E-4	> 1.00E-4	
HOP-92	1.358	2.130	2.102	2.032	1.802	1.814	1.757	96	87	57	59	52	> 1.00E-4	> 1.00E-4	> 1.00E-4	
NCI-H226	1.411	3.058	2.992	2.969	2.190	1.981	1.863	96	95	47	35	27	8.75E-7	> 1.00E-4	> 1.00E-4	
NCI-H23	0.558	1.811	1.778	1.742	1.068	0.870	0.810	97	94	41	25	20	6.71E-7	> 1.00E-4	> 1.00E-4	
NCI-H322M	0.916	2.263	2.189	2.170	1.421	1.512	1.442	94	93	37	44	39	5.95E-7	> 1.00E-4	> 1.00E-4	
NCI-H460	0.326	2.819	2.891	2.840	0.691	0.536	0.457	103	101	15	8	5	3.89E-7	> 1.00E-4	> 1.00E-4	
NCI-H522	1.295	3.060	2.992	2.891	2.014	1.916	1.669	96	90	41	35	21	6.51E-7	> 1.00E-4	> 1.00E-4	
Colon Cancer																
COLO 205	0.508	2.607	2.606	2.450	0.926	0.693	0.552	100	93	20	9	2	3.85E-7	> 1.00E-4	> 1.00E-4	
HCC-2998	0.734	2.521	2.304	2.299	1.672	0.899	0.912	88	88	53	9	10	1.14E-6	> 1.00E-4	> 1.00E-4	
HCT-116	0.308	2.668	2.591	2.630	1.031	0.614	0.482	97	98	31	13	7	5.18E-7	> 1.00E-4	> 1.00E-4	
HCT-15	0.314	1.949	1.872	1.701	0.798	0.624	0.571	95	85	30	19	16	4.27E-7	> 1.00E-4	> 1.00E-4	
HT29	0.426	2.501	2.503	2.507	0.722	0.719	0.729	100	100	14	14	15	3.84E-7	> 1.00E-4	> 1.00E-4	
KM12	0.765	3.251	3.200	3.053	1.560	1.303	1.254	98	92	32	22	20	5.01E-7	> 1.00E-4	> 1.00E-4	
SW-620	0.351	2.670	2.628	2.353	0.862	0.876	0.825	98	86	22	23	20	3.67E-7	> 1.00E-4	> 1.00E-4	
CNS Cancer																
SF-268	0.855	2.649	2.520	2.321	1.757	1.833	1.574	93	82	50	55	40	2.05E-5	> 1.00E-4	> 1.00E-4	
SF-295	0.680	2.959	2.783	2.713	1.123	0.953	1.004	92	89	19	12	14	3.65E-7	> 1.00E-4	> 1.00E-4	
SF-539	0.721	2.698	2.631	2.438	0.824	0.586	0.626	97	87	5	-19	-13	2.83E-7	1.65E-6	> 1.00E-4	
SNB-19	0.458	1.805	1.752	1.643	0.916	0.787	0.792	96	88	34	24	25	5.05E-7	> 1.00E-4	> 1.00E-4	
SNB-75	1.401	2.541	2.323	2.262	1.482	1.726	1.859	81	75	7	29	40	2.36E-7	> 1.00E-4	> 1.00E-4	
U251	0.520	2.456	2.404	2.363	1.269	1.074	0.976	97	95	39	29	24	6.31E-7	> 1.00E-4	> 1.00E-4	
Melanoma																
LOX IMVI	0.410	2.728	2.611	2.502	1.211	0.893	0.732	95	90	35	21	14	5.28E-7	> 1.00E-4	> 1.00E-4	
MALME-3M	0.681	1.485	1.420	1.348	1.007	0.938	1.016	92	83	41	32	42	5.99E-7	> 1.00E-4	> 1.00E-4	
M14	0.377	1.681	1.582	1.534	0.478	0.383	0.411	92	89	8	.	3	3.01E-7	> 1.00E-4	> 1.00E-4	
MDA-MB-435	0.682	3.018	3.016	2.151	0.509	0.675	0.654	100	63	-25	-1	-4	1.40E-7	5.16E-7	> 1.00E-4	
SK-MEL-2	1.121	2.211	2.188	2.199	1.884	1.748	1.811	98	99	70	58	63	> 1.00E-4	> 1.00E-4	> 1.00E-4	
SK-MEL-28	0.579	1.898	1.886	1.677	1.230	1.184	1.182	99	83	49	46	46	9.56E-7	> 1.00E-4	> 1.00E-4	
SK-MEL-5	0.916	3.124	3.045	2.847	1.151	0.931	0.620	96	87	11	1	-32	3.07E-7	1.05E-5	> 1.00E-4	
UACC-257	1.066	2.574	2.441	2.396	2.019	2.136	2.077	91	88	63	71	67	> 1.00E-4	> 1.00E-4	> 1.00E-4	
UACC-62	0.921	2.893	2.850	2.657	1.336	1.430	1.592	98	88	21	26	34	3.70E-7	> 1.00E-4	> 1.00E-4	
Ovarian Cancer																
IGROV1	0.523	2.070	2.035	1.922	1.250	0.994	0.855	98	90	47	30	21	8.52E-7	> 1.00E-4	> 1.00E-4	
OVCAR-3	0.372	1.338	1.315	1.228	0.448	0.353	0.408	98	89	8	-5	4	3.01E-7	.	> 1.00E-4	
OVCAR-4	0.882	1.736	1.719	1.691	1.546	1.374	1.263	98	95	78	58	45	3.84E-5	> 1.00E-4	> 1.00E-4	
OVCAR-5	0.583	1.322	1.376	1.313	0.985	0.846	0.815	107	99	54	36	31	1.72E-6	> 1.00E-4	> 1.00E-4	
OVCAR-8	0.451	2.156	2.181	2.186	1.248	0.992	0.915	101	102	47	32	27	8.71E-7	> 1.00E-4	> 1.00E-4	
NCI/ADR-RES	0.510	1.800	1.804	1.680	0.734	0.534	0.576	100	91	17	2	5	3.59E-7	> 1.00E-4	> 1.00E-4	
SK-OV-3	0.657	1.821	1.739	1.715	1.216	1.242	1.211	93	91	48	50	48	.	> 1.00E-4	> 1.00E-4	
Renal Cancer																
786-0	0.812	2.791	2.712	2.692	1.749	1.750	1.300	96	95	47	47	25	8.78E-7	> 1.00E-4	> 1.00E-4	
A498	1.592	2.177	1.957	1.988	1.554	1.428	1.378	62	68	-2	-10	-13	1.79E-7	9.25E-7	> 1.00E-4	
ACHN	0.410	1.695	1.709	1.626	0.929	0.830	0.747	101	95	40	33	26	6.65E-7	> 1.00E-4	> 1.00E-4	
CAKI-1	0.652	2.292	2.054	1.803	1.160	1.241	1.257	85	70	31	36	37	3.27E-7	> 1.00E-4	> 1.00E-4	
RXF 393	1.262	2.065	1.998	1.902	1.351	1.136	1.228	92	80	11	-10	-3	2.71E-7	3.35E-6	> 1.00E-4	
SN12C	0.507	2.098	2.057	1.947	1.107	0.969	0.900	97	91	38	29	25	5.85E-7	> 1.00E-4	> 1.00E-4	
TK-10	0.902	1.940	1.914	1.890	1.696	1.652	1.621	97	95	76	72	69	> 1.00E-4	> 1.00E-4	> 1.00E-4	
UO-31	0.736	1.995	1.894	1.829	1.390	1.341	1.318	92	87	52	48	46	3.14E-6	> 1.00E-4	> 1.00E-4	
Prostate Cancer																
PC-3	0.528	2.258	2.195	2.097	1.131	1.072	1.066	96	91	35	31	31	5.35E-7	> 1.00E-4	> 1.00E-4	
DU-145	0.309	1.398	1.462	1.373	0.539	0.503	0.388	106	98	21	18	7	4.19E-7	> 1.00E-4	> 1.00E-4	
Breast Cancer																
MCF7	0.528	2.804	2.628	2.327	1.098	1.015	0.977	92	79	25	21	20	3.45E-7	> 1.00E-4	> 1.00E-4	
MDA-MB-231/ATCC	0.695	1.566	1.616	1.564	1.281	0.925	0.687	106	100	67	26	-1	2.65E-6	9.08E-5	> 1.00E-4	
HS 578T	1.313	2.359	2.301	2.168	1.568	1.462	1.513	94	82	24	14	19	3.57E-7	> 1.00E-4	> 1.00E-4	
BT-549	1.353	2.668	2.494	2.493	2.030	1.373	1.137	87	87	51	1	-16	1.07E-6	1.22E-5	> 1.00E-4	
T-47D	0.800	2.026	1.959	1.925	1.212	1.350	1.473	95	92	34	45	55	.	> 1.00E-4	> 1.00E-4	
MDA-MB-468	1.188	2.237	2.192	2.081	1.449	1.317	1.265	96	85	25	12	7	3.83E-7	> 1.00E-4	> 1.00E-4	

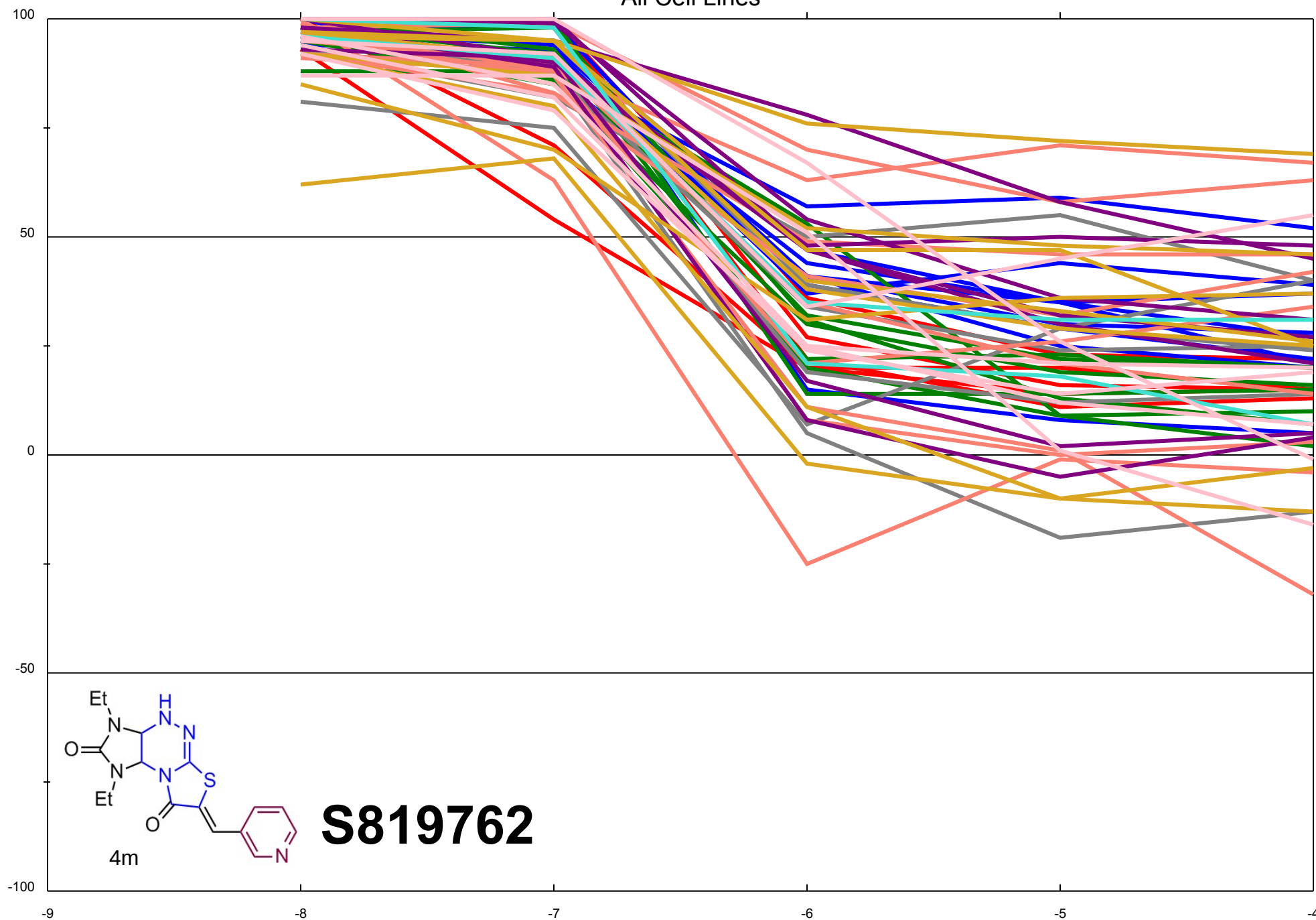
Dose Response Curves

Report Date:January 26, 2020

Test Date:December 09, 2019

All Cell Lines

Percentage Growth

**S819762**Log₁₀ of Sample Concentration (Molar)

S19

National Cancer Institute Developmental Therapeutics Program In-Vitro Testing Results

NSC : D - 809947 / 1

Report Date : January 09, 2019

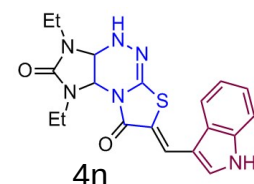
COMI : IA675

Experiment ID : 1812NS43

Test Date : December 17, 2018

Stain Reagent : SRB Dual-Pass Related

Units : Molar



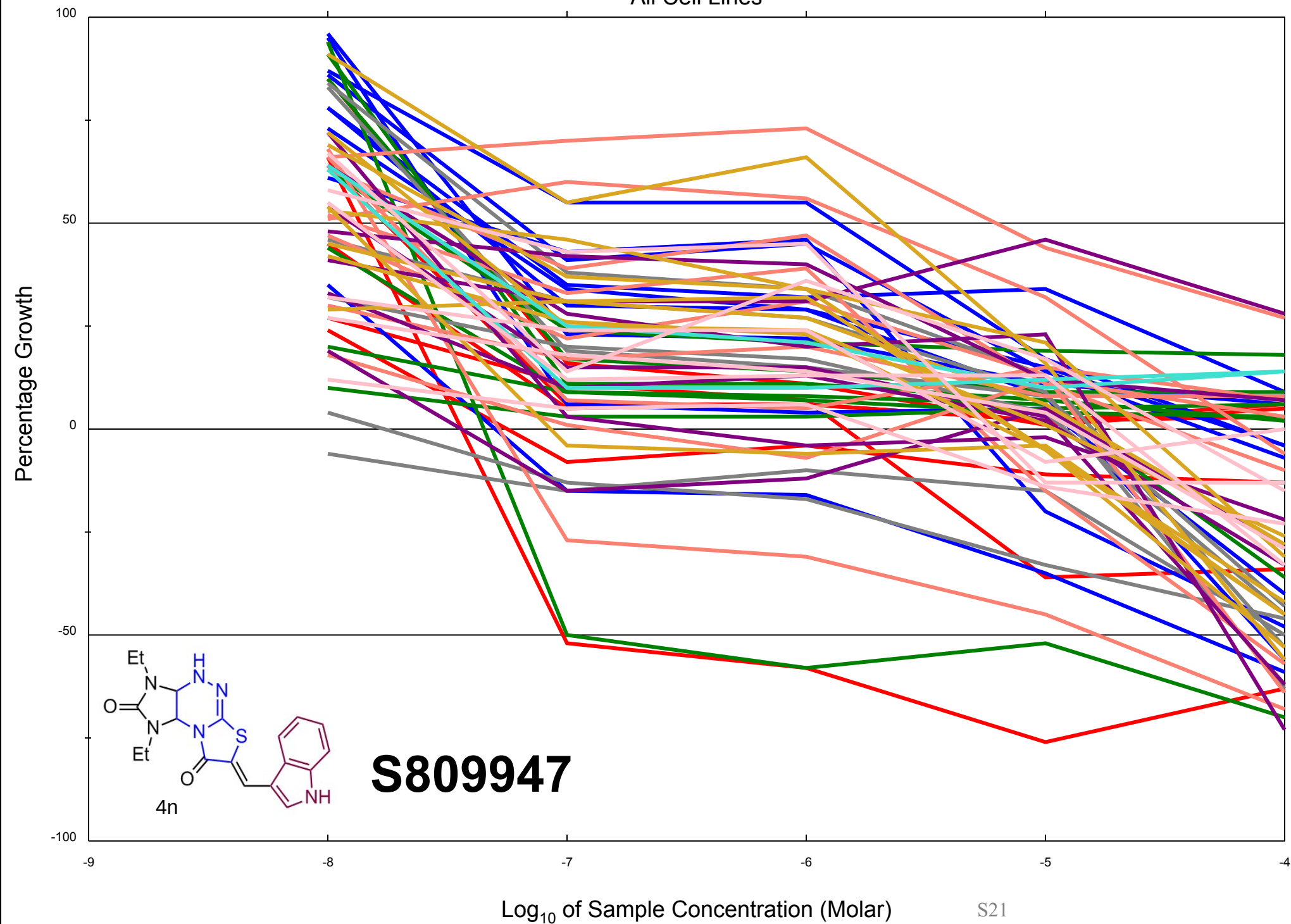
			Log10 Concentration													
Panel/Cell Line	Time	Mean Optical Densities							Percent Growth					GI50	TGI	LC50
	Zero	Ctrl	-8.0	-7.0	-6.0	-5.0	-4.0	-8.0	-7.0	-6.0	-5.0	-4.0				
Leukemia																
CCRF-CEM	0.328	1.713	1.213	0.418	0.405	0.352	0.372	64	6	6	2	3	1.75E-8	> 1.00E-4	> 1.00E-4	
HL-60(TB)	1.047	3.379	2.592	0.504	0.442	0.247	0.389	66	-52	-58	-76	-63	1.37E-8	3.64E-8	9.63E-8	
K-562	0.285	2.467	1.273	0.398	0.412	0.334	0.414	45	5	6	2	6	< 1.00E-8	> 1.00E-4	> 1.00E-4	
MOLT-4	0.625	2.533	2.254	0.930	0.840	0.645	0.725	85	16	11	1	5	3.23E-8	> 1.00E-4	> 1.00E-4	
RPMI-8226	0.725	2.223	1.129	0.893	0.823	0.463	0.482	27	11	7	-36	-34	< 1.00E-8	1.42E-6	> 1.00E-4	
SR	0.400	1.060	0.561	0.368	0.386	0.355	0.350	24	-8	-4	-11	-13	< 1.00E-8	5.65E-8	> 1.00E-4	
Non-Small Cell Lung Cancer																
A549/ATCC	0.310	1.895	1.831	0.677	0.661	0.492	0.405	96	23	22	11	6	4.28E-8	> 1.00E-4	> 1.00E-4	
EKVX	0.678	1.815	1.566	1.072	1.037	1.062	0.776	78	35	32	34	9	4.43E-8	> 1.00E-4	> 1.00E-4	
HOP-62	0.665	2.092	1.704	1.148	1.078	0.783	0.291	73	34	29	8	-56	3.84E-8	1.34E-5	7.98E-5	
HOP-92	0.960	1.593	1.344	1.230	1.248	0.771	0.499	61	43	46	-20	-48	3.93E-8	4.99E-6	> 1.00E-4	
NCI-H226	0.875	2.156	1.996	1.586	1.575	1.099	0.837	87	55	55	17	-4	1.33E-6	6.32E-5	> 1.00E-4	
NCI-H23	0.569	1.941	1.638	0.977	0.964	0.777	0.544	78	30	29	15	-4	3.80E-8	5.91E-5	> 1.00E-4	
NCI-H322M	0.808	1.987	1.827	1.291	1.334	0.971	0.753	86	41	45	14	-7	6.32E-8	4.66E-5	> 1.00E-4	
NCI-H460	0.185	1.841	1.758	0.287	0.247	0.265	0.111	95	6	4	5	-40	3.21E-8	1.28E-5	> 1.00E-4	
NCI-H522	0.757	2.334	1.313	0.642	0.639	0.490	0.309	35	-15	-16	-35	-59	< 1.00E-8	4.99E-8	4.13E-5	
Colon Cancer																
COLO 205	0.396	1.306	1.248	0.198	0.167	0.191	0.119	94	-50	-58	-52	-70	2.01E-8	4.48E-8	9.98E-8	
HCC-2998	0.868	2.730	2.560	1.080	1.064	1.000	0.900	91	11	11	7	2	3.27E-8	> 1.00E-4	> 1.00E-4	
HCT-116	0.162	1.789	0.485	0.309	0.290	0.259	0.104	20	9	8	6	-36	< 1.00E-8	1.39E-5	> 1.00E-4	
HCT-15	0.291	1.610	1.412	0.515	0.478	0.409	0.410	85	17	14	9	9	3.27E-8	> 1.00E-4	> 1.00E-4	
HT29	0.193	1.503	0.323	0.239	0.237	0.254	0.277	10	3	3	5	6	< 1.00E-8	> 1.00E-4	> 1.00E-4	
KM12	0.396	2.085	1.145	0.550	0.519	0.466	0.451	44	9	7	4	3	< 1.00E-8	> 1.00E-4	> 1.00E-4	
SW-620	0.248	1.882	1.279	0.633	0.587	0.561	0.538	63	24	21	19	18	2.14E-8	> 1.00E-4	> 1.00E-4	
CNS Cancer																
SF-268	0.567	2.112	1.283	1.049	0.981	0.703	0.211	46	31	27	9	-63	< 1.00E-8	1.33E-5	6.61E-5	
SF-295	1.110	3.067	1.731	1.496	1.442	1.197	0.611	32	20	17	4	-45	< 1.00E-8	1.23E-5	> 1.00E-4	
SF-539	1.011	2.480	0.949	0.856	0.907	0.863	0.504	-6	-15	-10	-15	-50	< 1.00E-8	< 1.00E-8	9.87E-5	
SNB-19	0.635	2.048	1.826	1.172	1.116	0.817	0.298	84	38	34	13	-53	5.50E-8	1.57E-5	8.98E-5	
SNB-75	1.546	2.305	1.580	1.343	1.290	1.035	0.830	4	-13	-17	-33	-46	< 1.00E-8	1.78E-8	> 1.00E-4	
U251	0.296	1.629	1.396	0.550	0.500	0.400	0.170	83	19	15	8	-43	3.25E-8	1.43E-5	> 1.00E-4	
Melanoma																
LOX IMVI	0.431	2.863	1.150	0.848	0.911	0.625	0.636	30	17	20	8	8	< 1.00E-8	> 1.00E-4	> 1.00E-4	
MALME-3M	0.790	1.680	1.354	1.138	1.205	0.885	0.708	63	39	47	11	-10	3.53E-8	3.21E-5	> 1.00E-4	
M14	0.457	2.010	1.477	0.572	0.536	0.683	0.565	66	7	5	15	7	1.86E-8	> 1.00E-4	> 1.00E-4	
MDA-MB-435	0.587	2.522	0.926	0.606	0.543	0.820	0.655	18	1	-7	12	3	< 1.00E-8	.	> 1.00E-4	
SK-MEL-2	0.834	2.026	1.389	1.099	1.201	0.986	0.299	47	22	31	13	-64	< 1.00E-8	1.46E-5	6.55E-5	
SK-MEL-28	0.683	1.966	1.332	1.452	1.408	1.088	0.642	51	60	56	32	-6	1.82E-6	6.89E-5	> 1.00E-4	
SK-MEL-5	0.792	2.770	2.145	0.580	0.547	0.439	0.254	68	-27	-31	-45	-68	1.56E-8	5.23E-8	1.70E-5	
UACC-257	0.742	2.006	1.582	1.628	1.663	1.304	1.082	66	70	73	44	27	6.38E-6	> 1.00E-4	> 1.00E-4	
UACC-62	0.869	2.737	1.835	1.482	1.591	0.743	0.373	52	33	39	-15	-57	1.23E-8	5.33E-6	6.80E-5	
Ovarian Cancer																
IGROV1	0.811	2.459	1.701	1.055	1.062	0.862	0.306	54	15	15	3	-62	1.27E-8	1.12E-5	6.48E-5	
OVCAR-3	0.328	1.220	0.499	0.279	0.290	0.371	0.232	19	-15	-12	5	-29	< 1.00E-8	.	> 1.00E-4	
OVCAR-4	0.653	1.516	1.064	1.016	0.999	0.753	0.712	48	42	40	12	7	< 1.00E-8	> 1.00E-4	> 1.00E-4	
OVCAR-5	0.629	1.358	0.927	0.852	0.854	0.963	0.835	41	31	31	46	28	< 1.00E-8	> 1.00E-4	> 1.00E-4	
OVCAR-8	0.439	1.873	0.909	0.581	0.628	0.467	0.296	33	10	13	2	-33	< 1.00E-8	1.14E-5	> 1.00E-4	
NCI/ADR-RES	0.650	2.043	1.651	0.687	0.626	0.634	0.507	72	3	-4	-2	-22	2.07E-8	2.62E-7	> 1.00E-4	
SK-OV-3	0.776	1.772	1.418	1.050	0.972	1.003	0.207	64	28	20	23	-73	2.46E-8	1.73E-5	5.71E-5	
Renal Cancer																
786-0	0.617	2.491	1.917	1.313	1.261	1.015	0.427	69	37	34	21	-31	3.99E-8	2.56E-5	> 1.00E-4	
A498	1.583	2.316	1.976	1.517	1.496	1.526	0.872	54	-4	-6	-4	-45	1.15E-8	8.47E-8	> 1.00E-4	
ACHN	0.297	1.137	0.676	0.554	0.521	0.344	0.214	45	31	27	6	-28	< 1.00E-8	1.47E-5	> 1.00E-4	
CAKI-1	1.018	2.608	1.689	1.435	1.384	0.963	0.586	42	26	23	-5	-42	< 1.00E-8	6.43E-6	> 1.00E-4	
RXF 393	1.326	2.009	1.522	1.538	1.542	1.266	0.736	29	31	32	-5	-45	< 1.00E-8	7.48E-6	> 1.00E-4	
SN12C	0.728	2.679	2.131	1.224	1.200	0.750	0.539	72	25	24	1	-26	2.96E-8	1.10E-5	> 1.00E-4	
TK-10	0.824	2.081	1.964	1.513	1.655	1.025	0.359	91	55	66	16	-56	2.09E-6	1.66E-5	8.15E-5	
UO-31	0.924	2.011	1.499	1.428	1.298	0.877	0.437	53	46	34	-5	-53	2.74E-8	7.43E-6	8.77E-5	
Prostate Cancer																
PC-3	0.455	1.798	1.311	0.791	0.742	0.594	0.647	64	25	21	10	14	2.26E-8	> 1.00E-4	> 1.00E-4	
DU-145	0.363	1.604	1.149	0.493	0.482	0.509	0.537	63	10	10	12	14	1.78E-8	> 1.00E-4	> 1.00E-4	
Breast Cancer																
MCF7	0.394	2.058	0.842	0.697	0.624	0.455	0.279	27	18	14	4	-29	< 1.00E-8	1.29E-5	> 1.00E-4	
MDA-MB-231/ATCC	0.745	1.539	1.183	0.841	0.847	0.848	0.497	55	12	13	13	-33	1.32E-8	1.91E-5	> 1.00E-4	
HS 578T	0.921	1.986	1.257	1.175	1.182	0.851	0.916	32	24	24	-8	.	< 1.00E-8	5.79E-6	> 1.00E-4	
BT-549	1.385	2.707	2.265	1.567	1.864	1.609	1.181	67	14	36	17	-15	2.06E-8	3.42E-5	> 1.00E-4	
T-47D	0.652	1.456	1.122	0.997	1.015	0.566	0.568	58	43	45	-13	-13	3.48E-8	5.94E-6	> 1.00E-4	
MDA-MB-468	0.819	1.798	0.941	0.867	0.873	0.706	0.635	12	5	6	-14	-23	< 1.00E-8	1.93E-6	> 1.00E-4	

Dose Response Curves

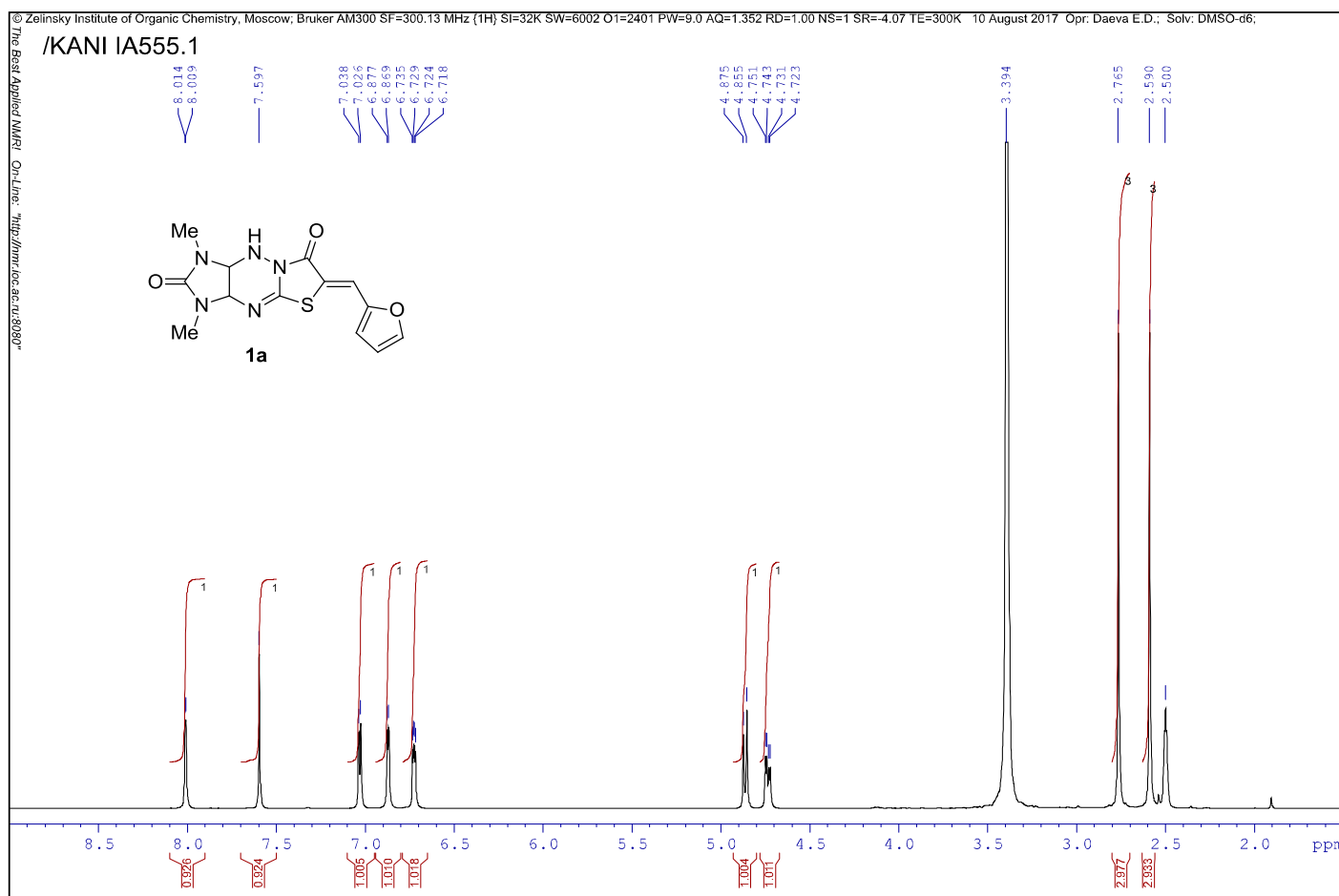
Report Date:January 09, 2019

Test Date:December 17, 2018

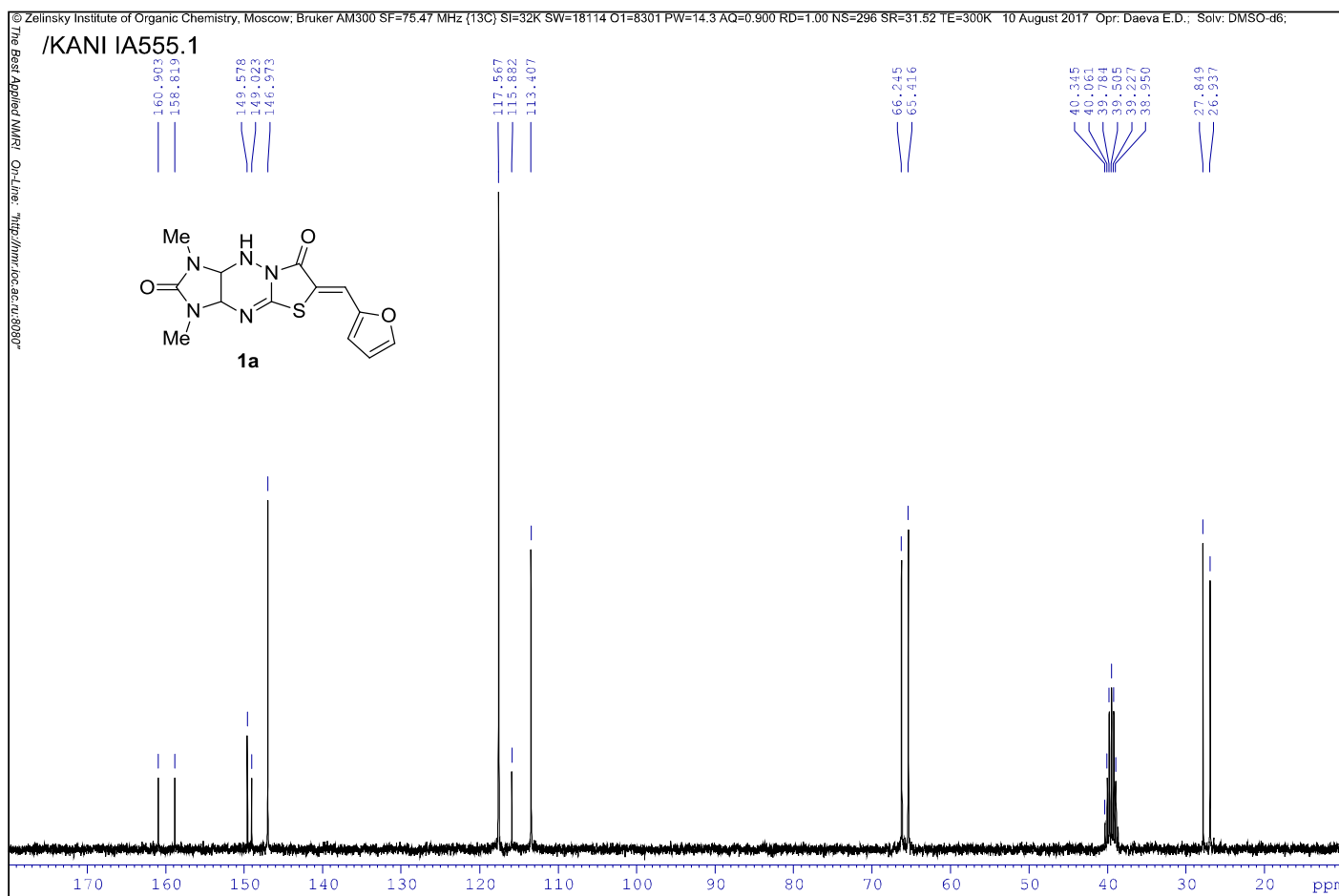
All Cell Lines



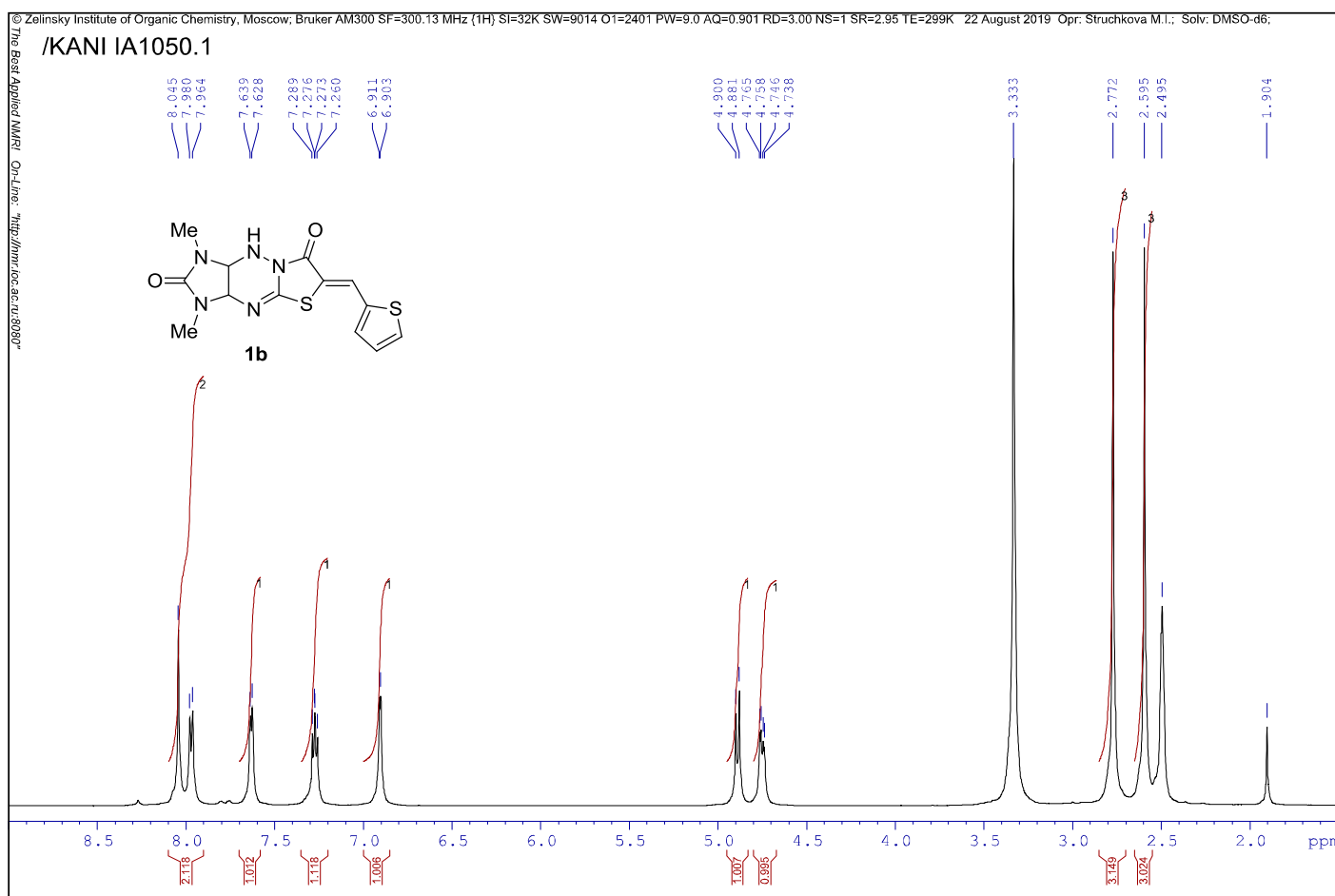
¹H NMR spectrum of **1a**



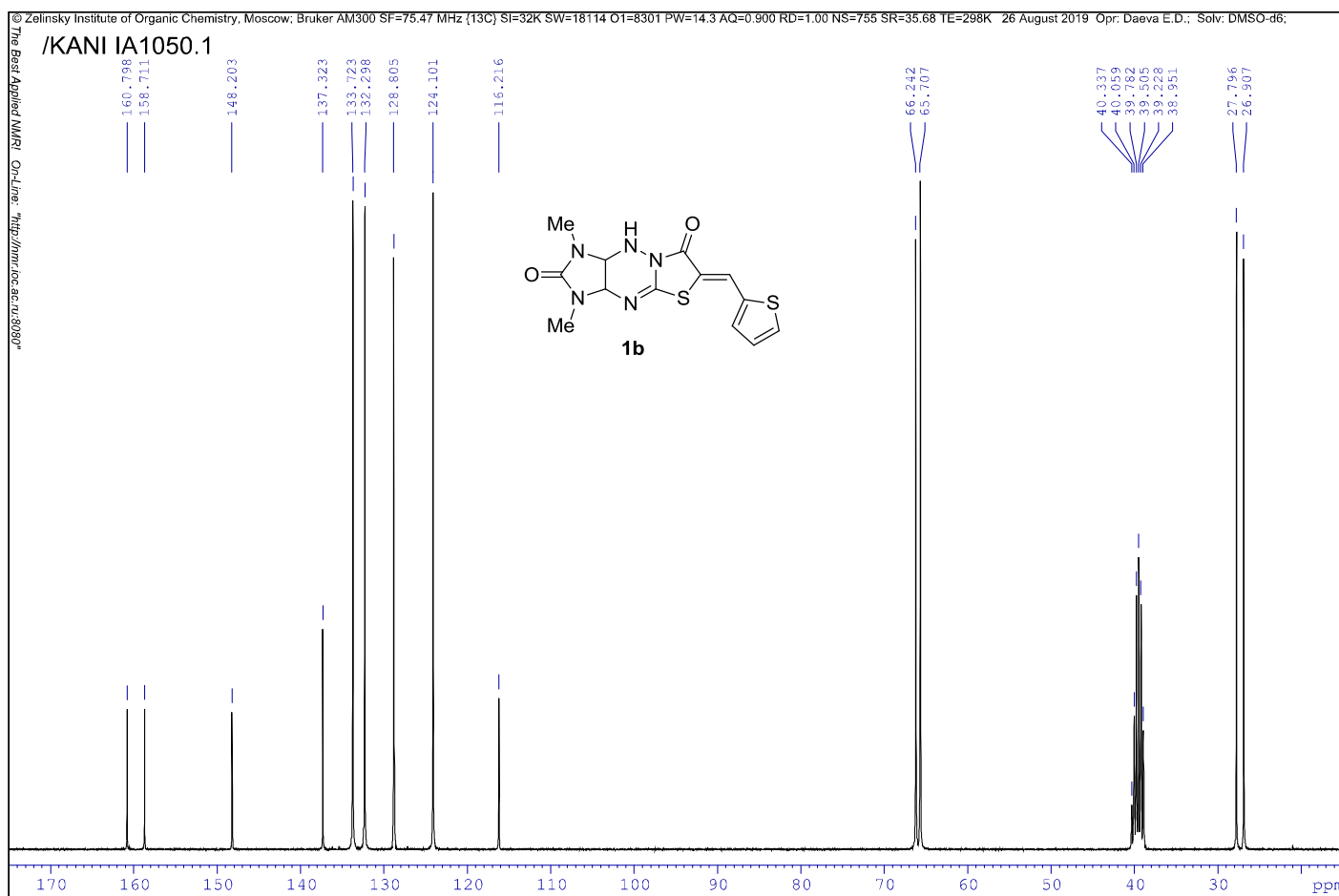
¹³C NMR spectrum of **1a**

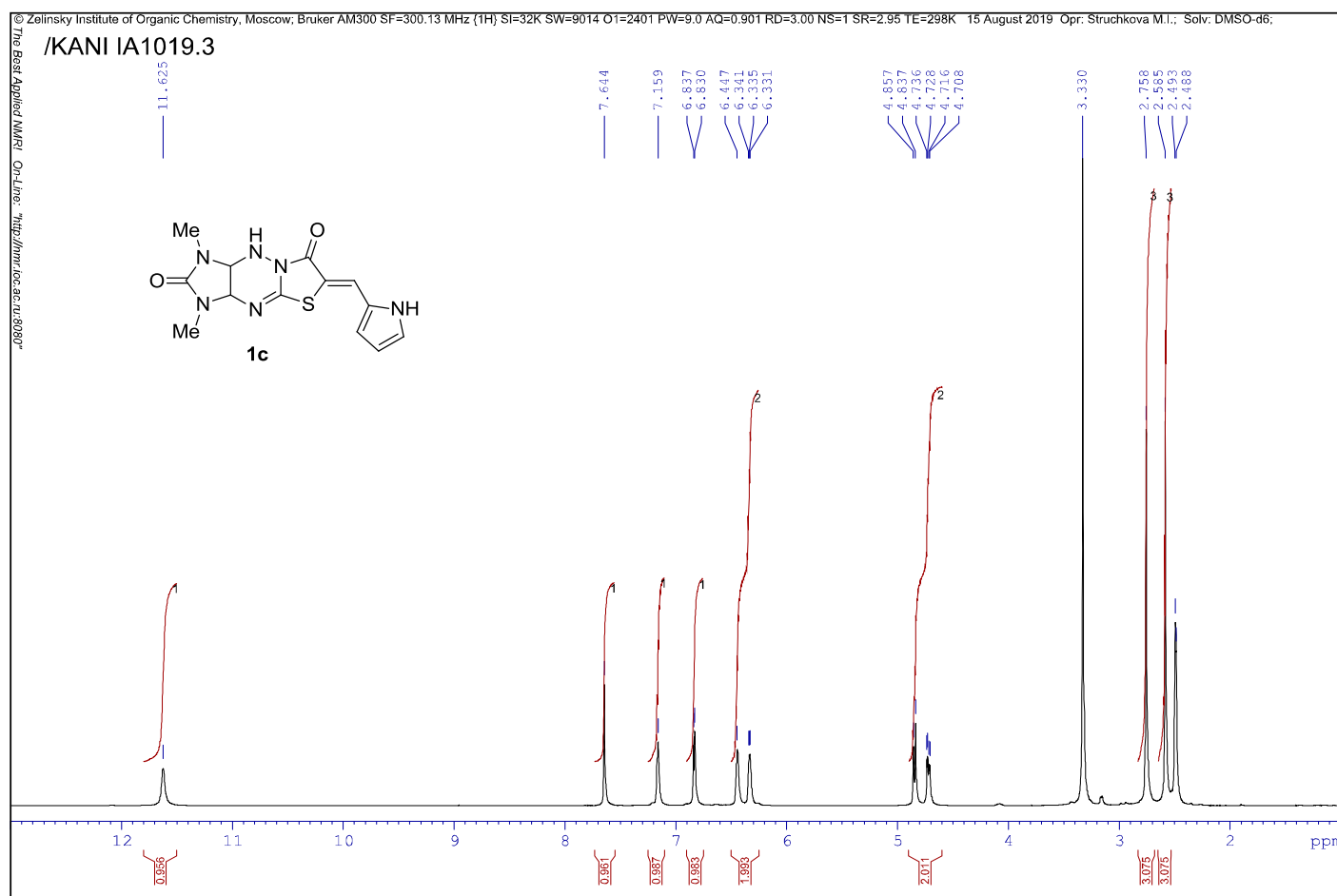


¹H NMR spectrum of **1b**

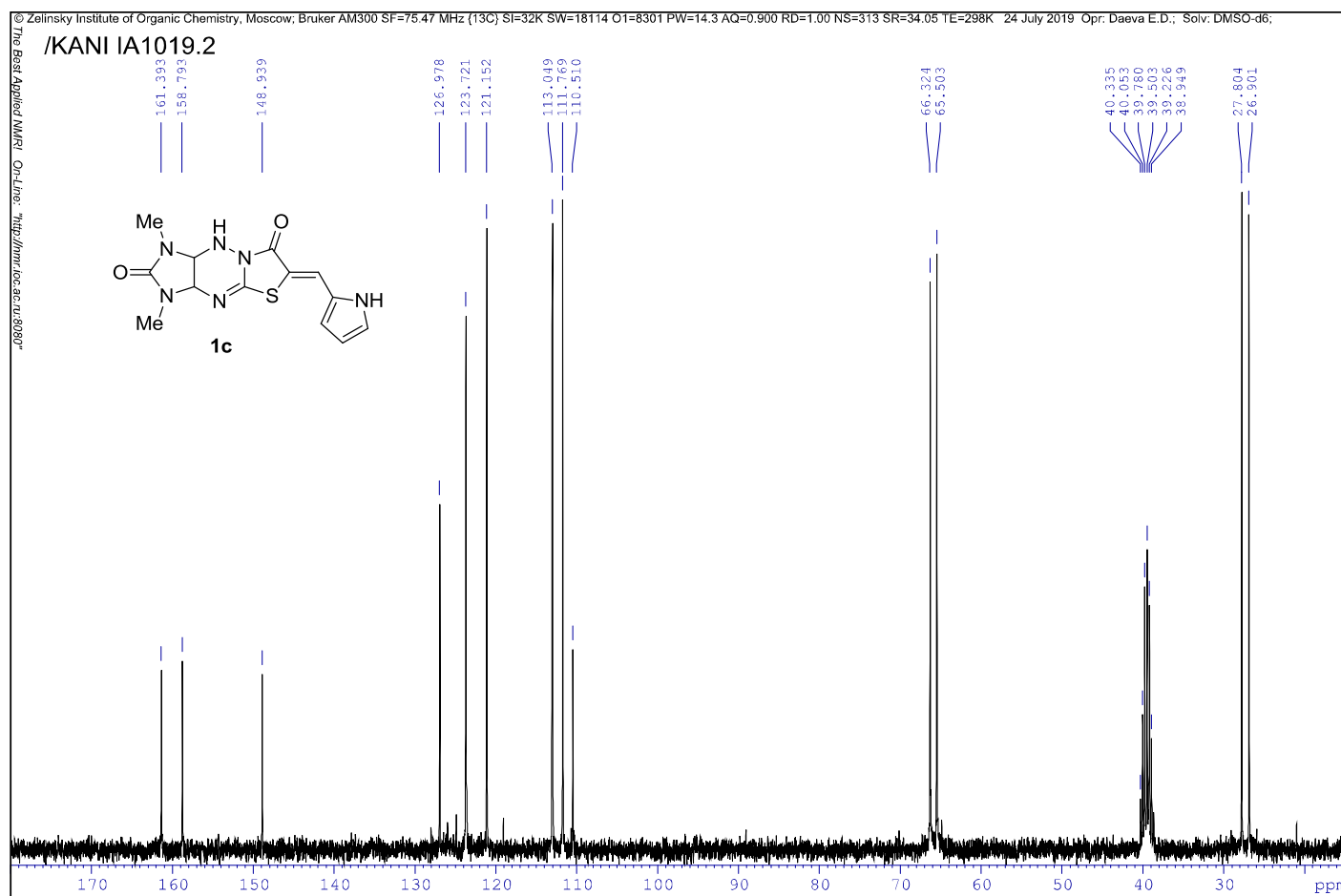


¹³C NMR spectrum of **1b**

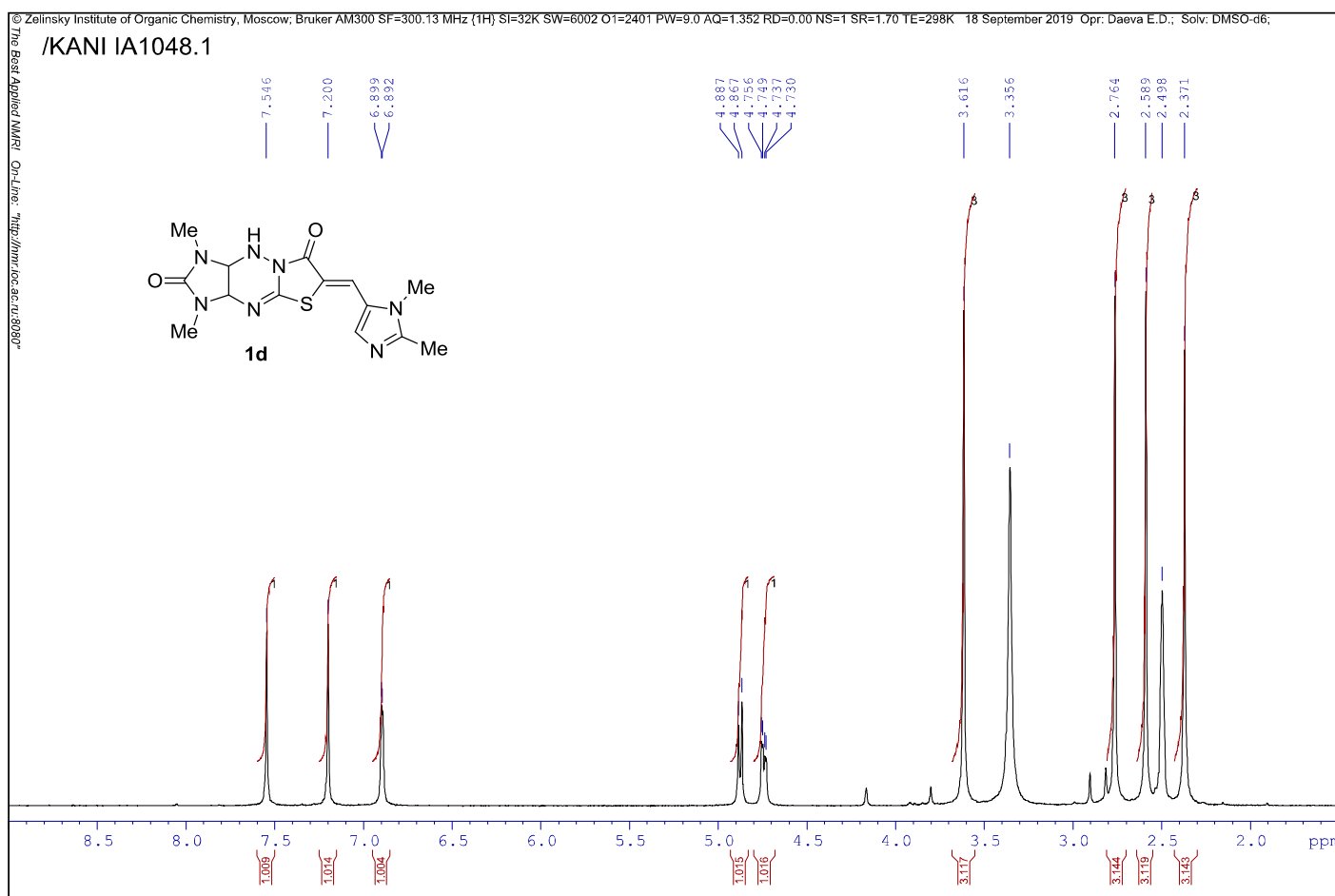


¹H NMR spectrum of **1c**

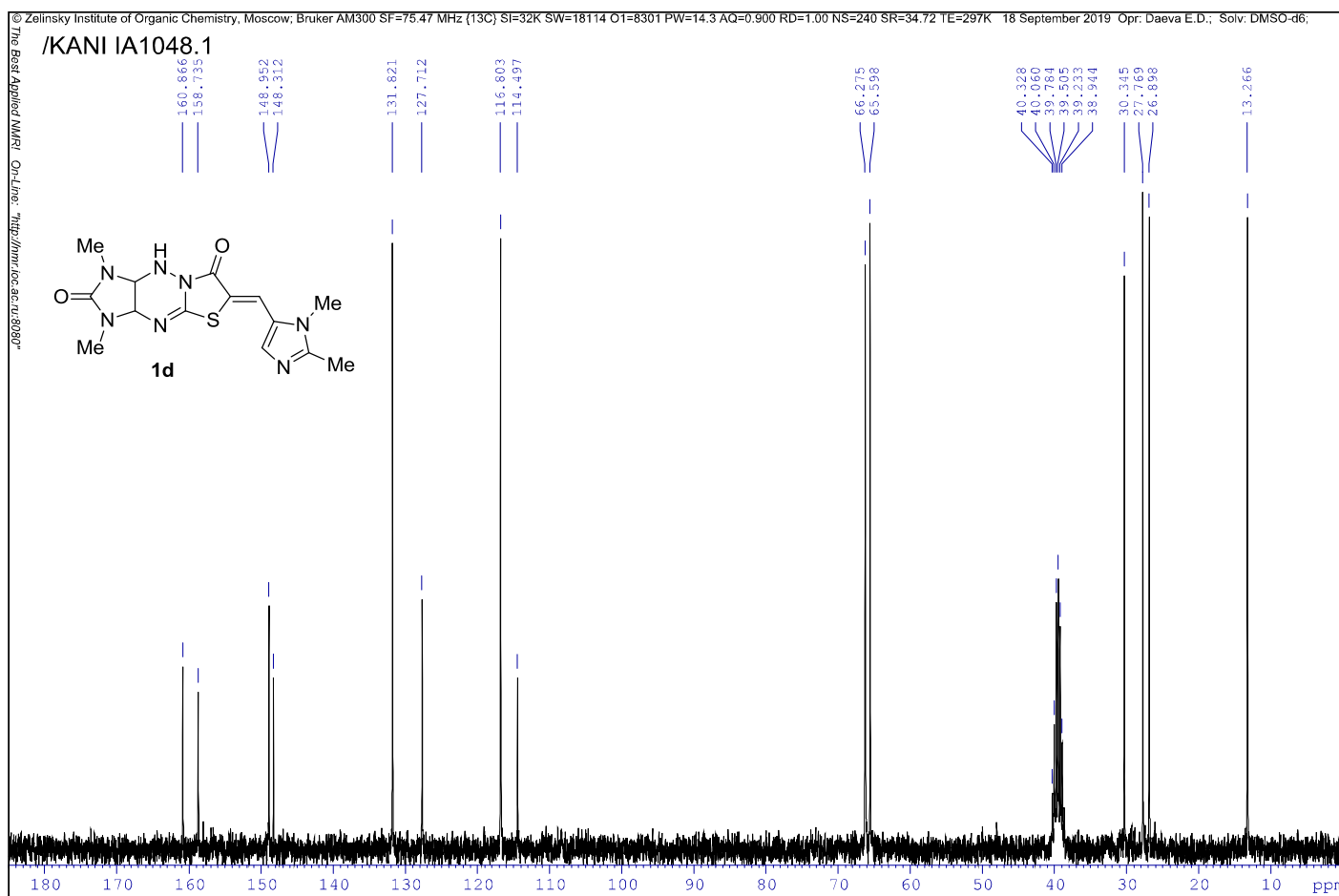
¹³C NMR spectrum of **1c**



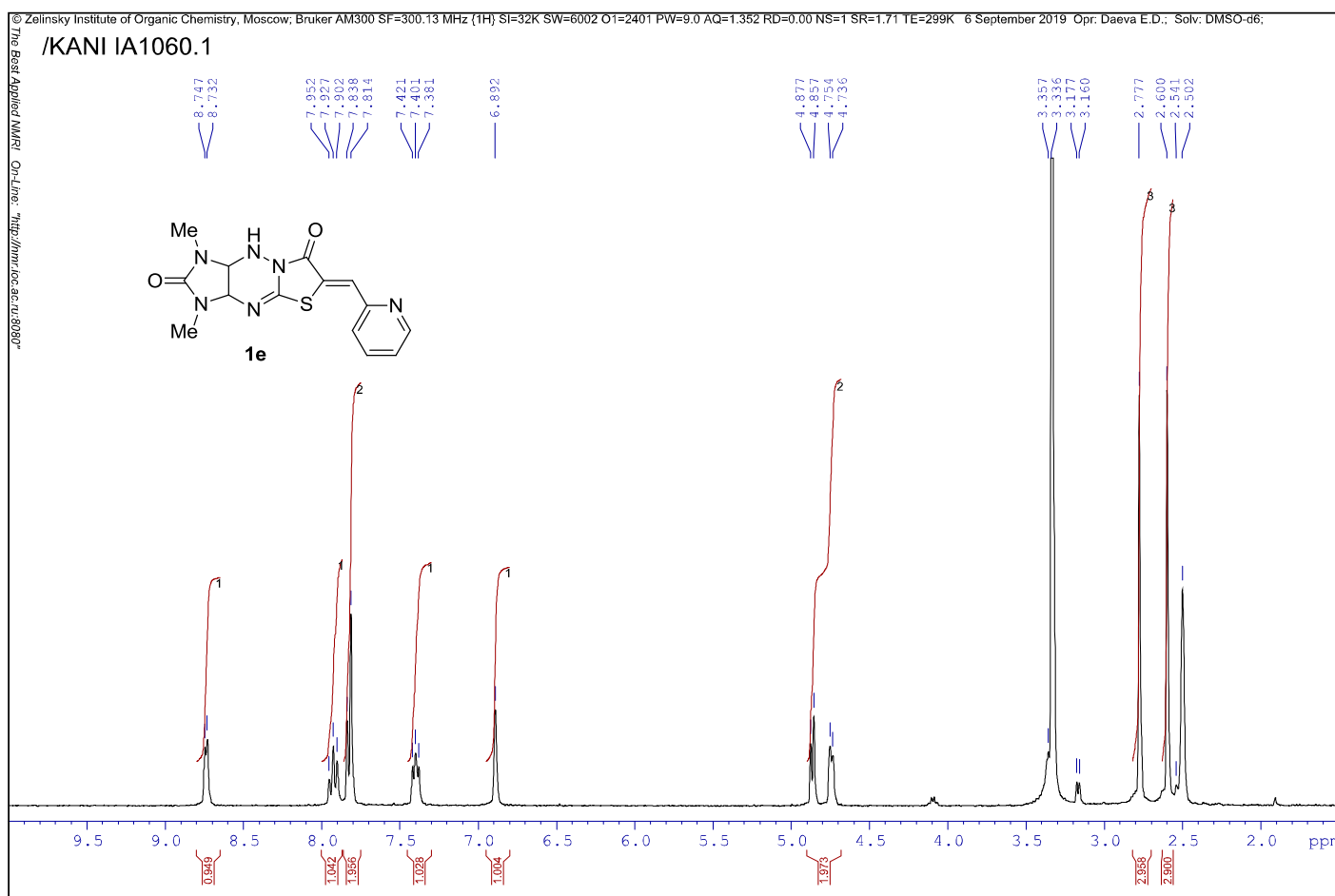
¹H NMR spectrum of **1d**



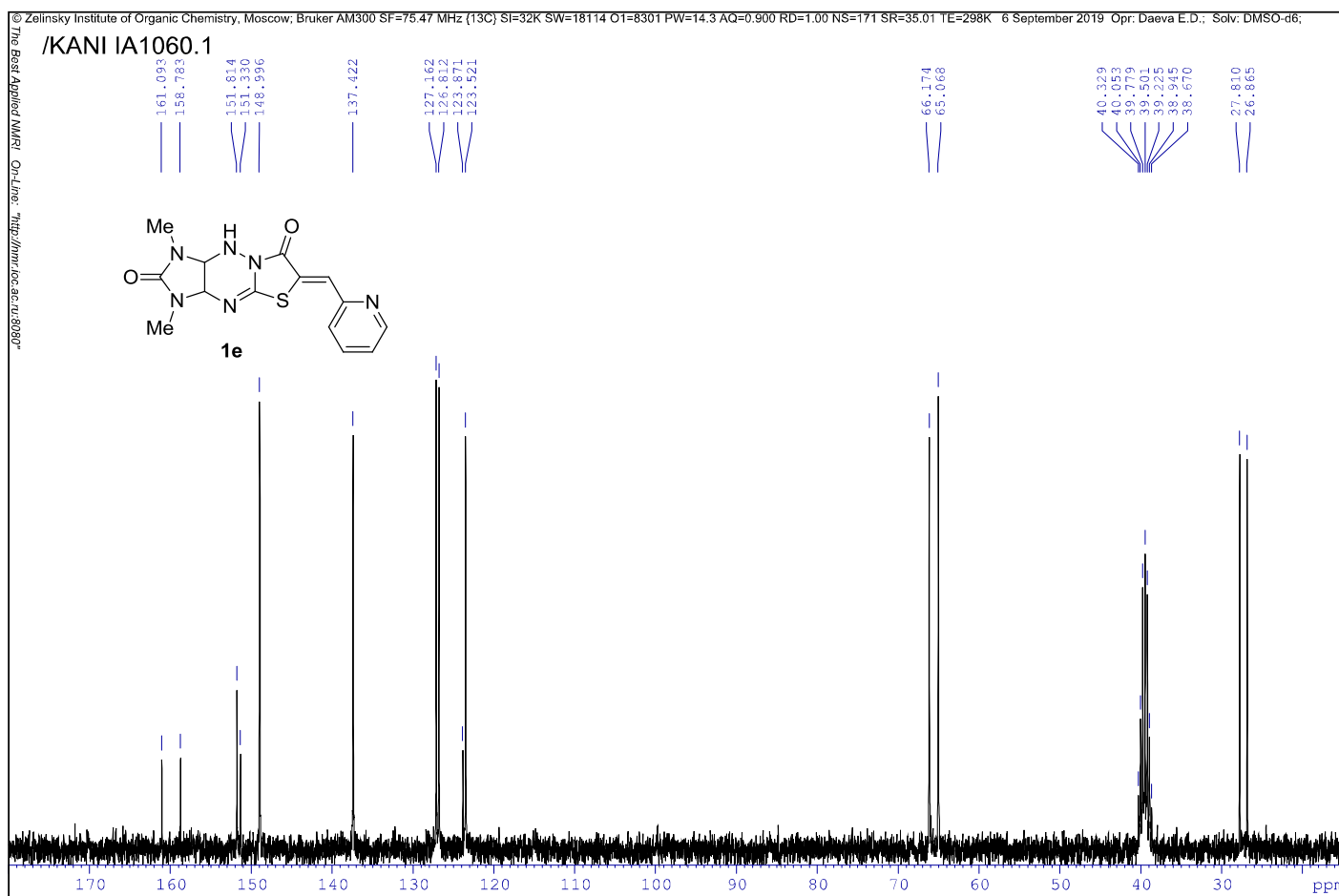
¹³C NMR spectrum of **1d**



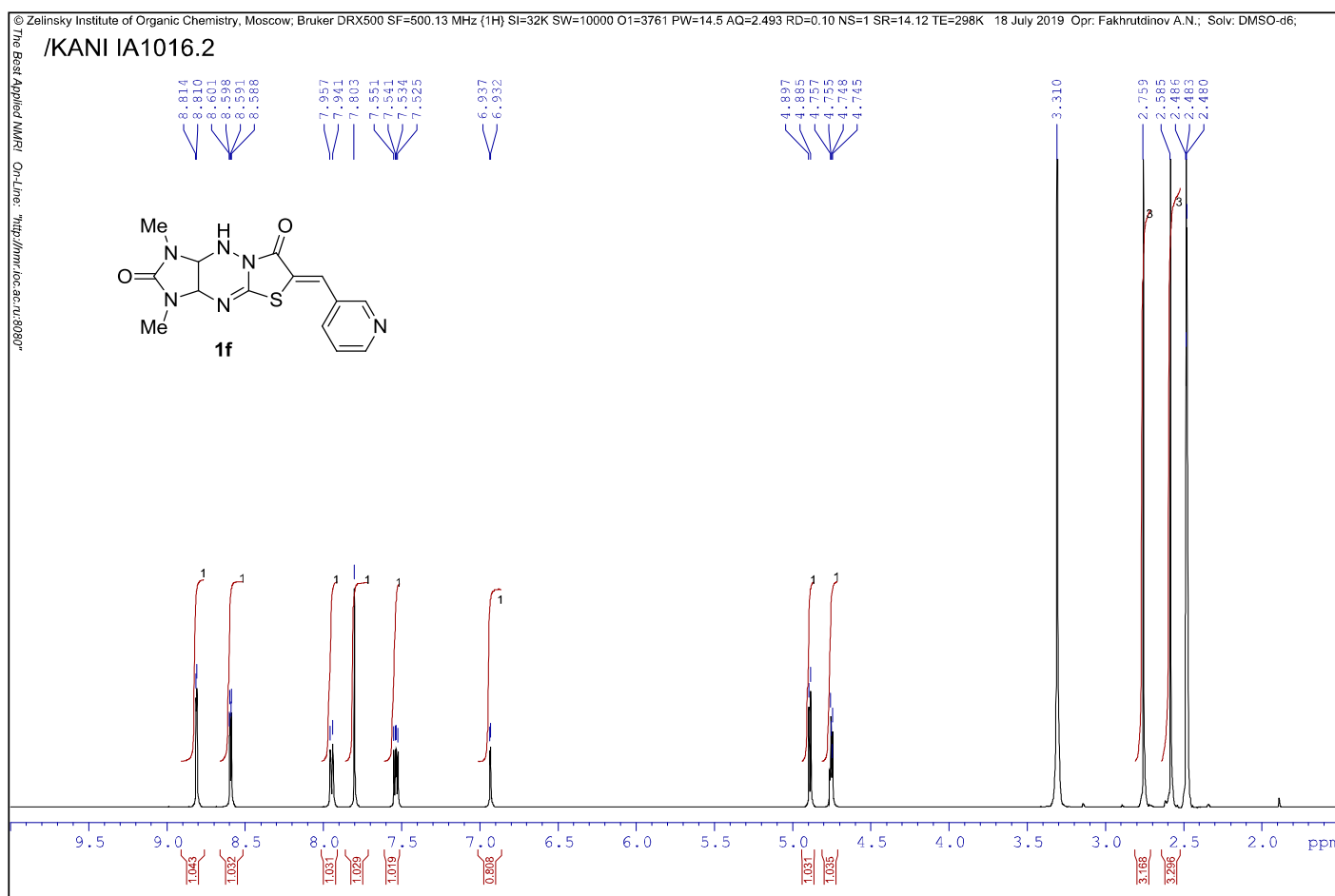
¹H NMR spectrum of **1e**



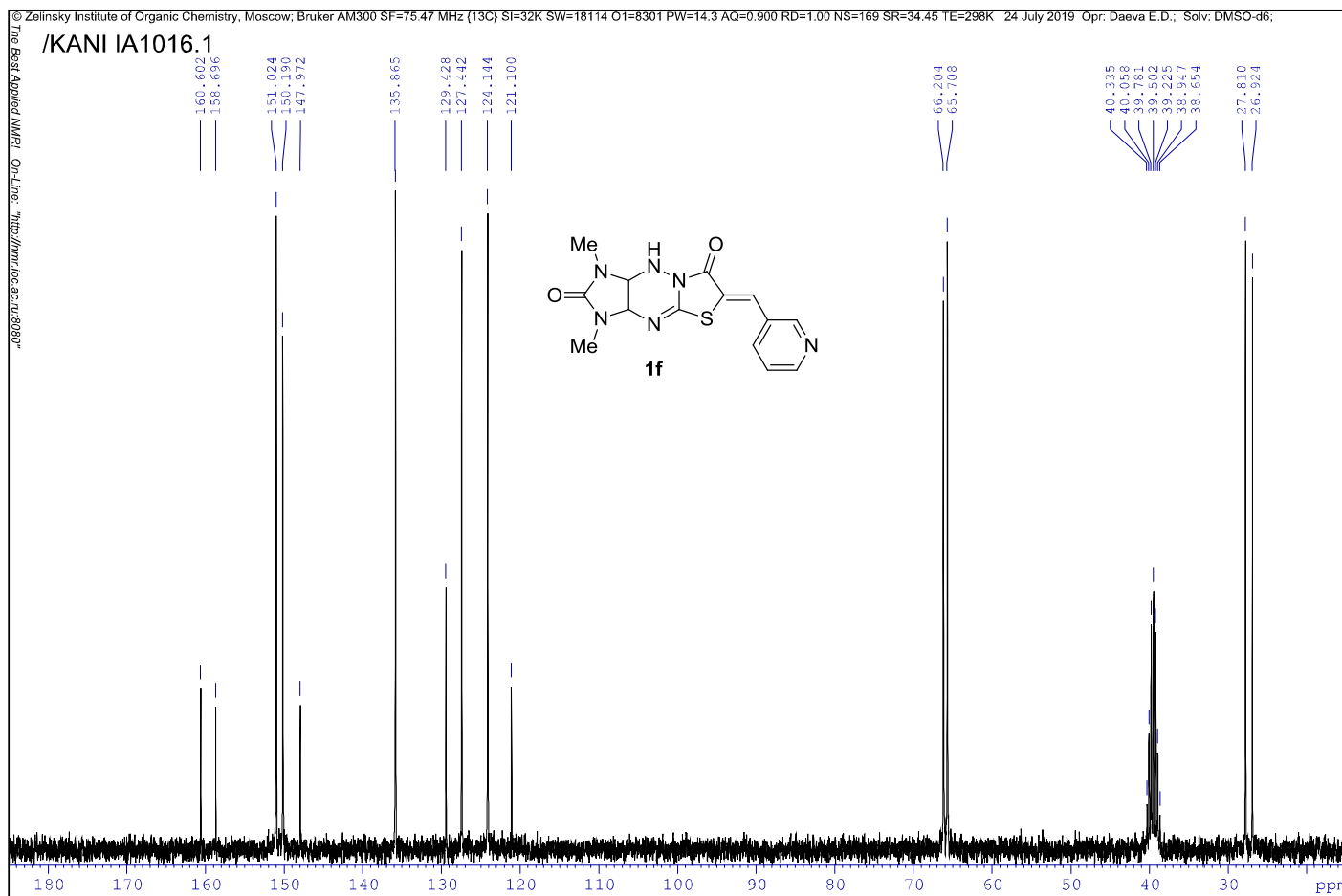
¹³C NMR spectrum of **1e**



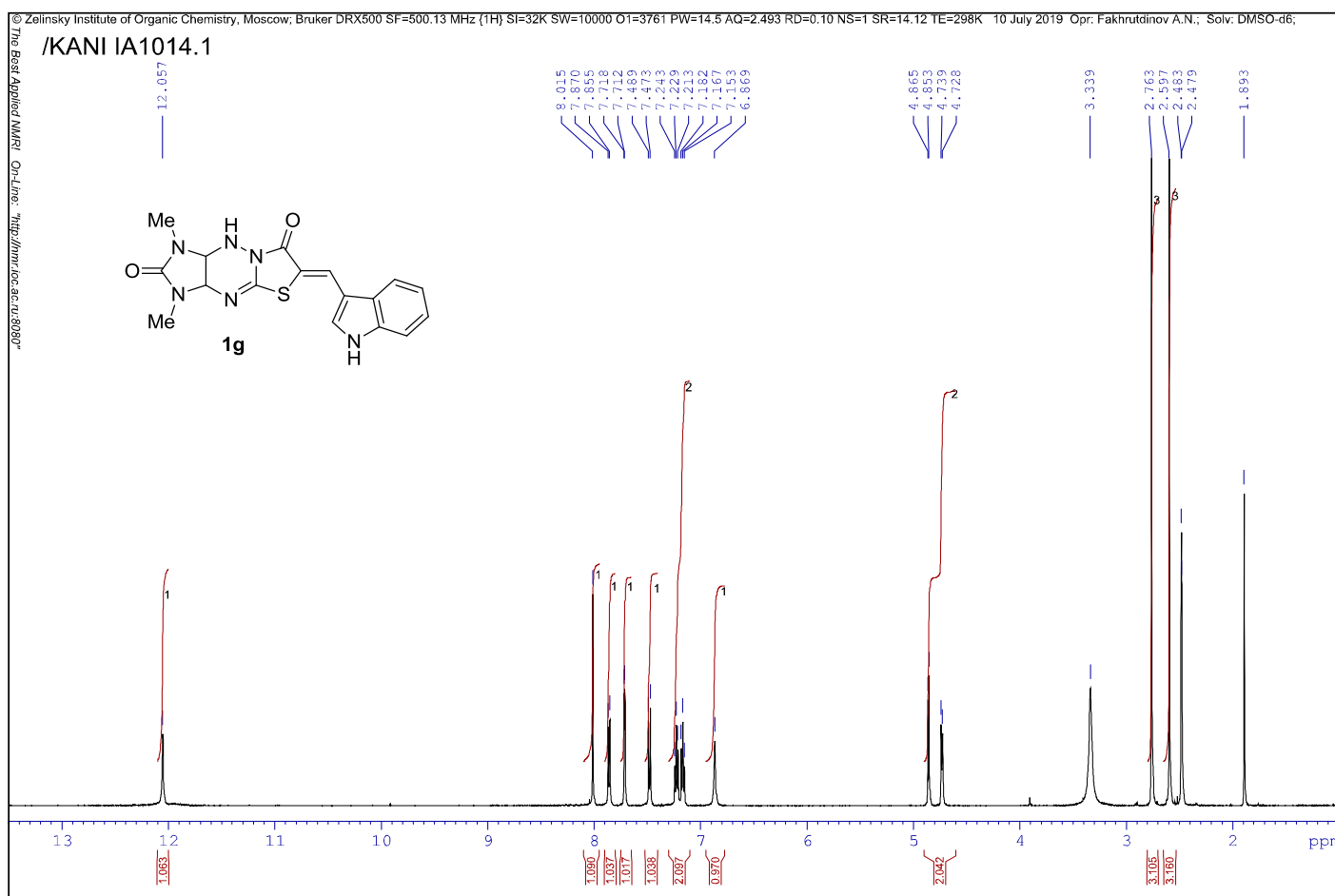
¹H NMR spectrum of **1f**



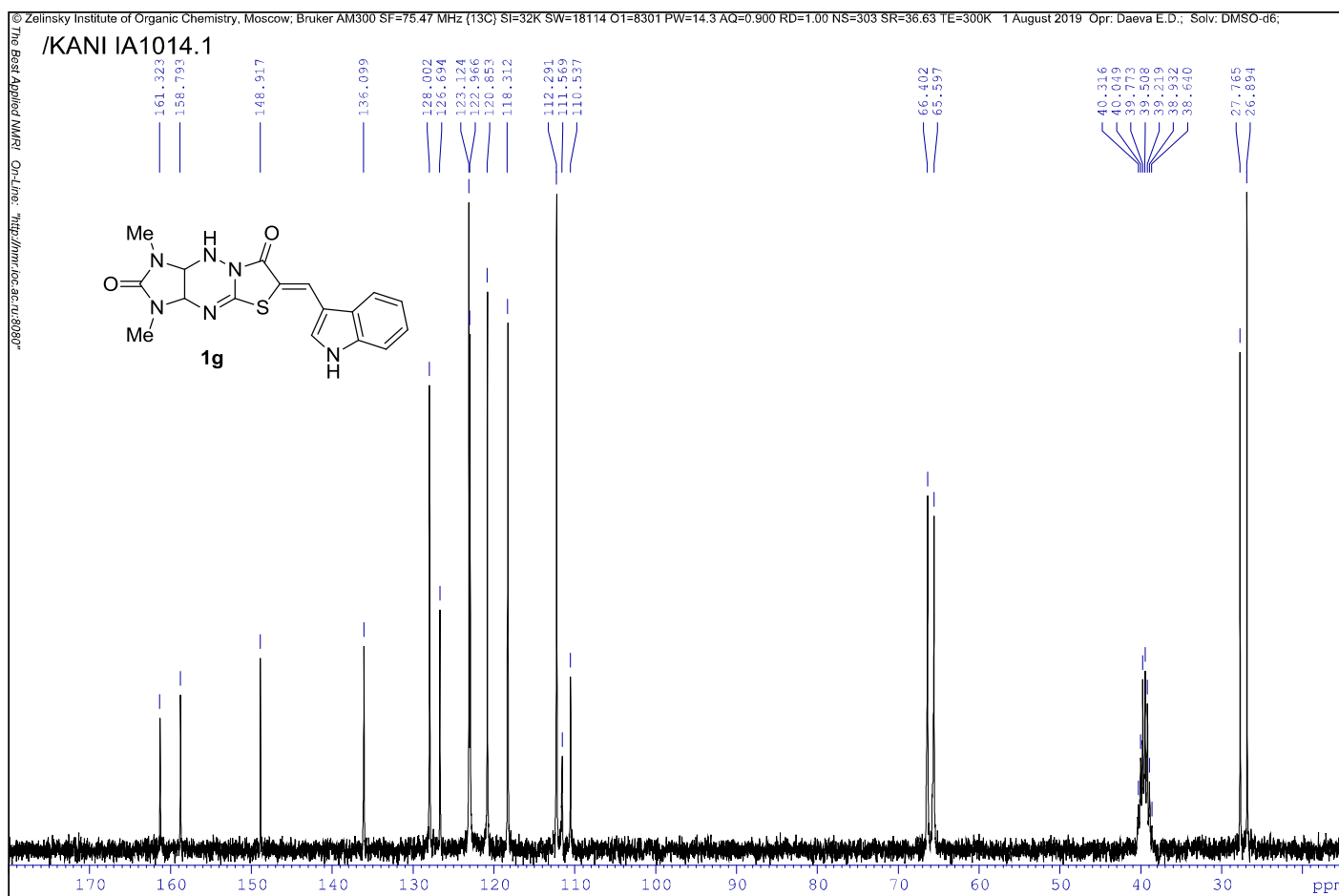
¹³C NMR spectrum of **1f**



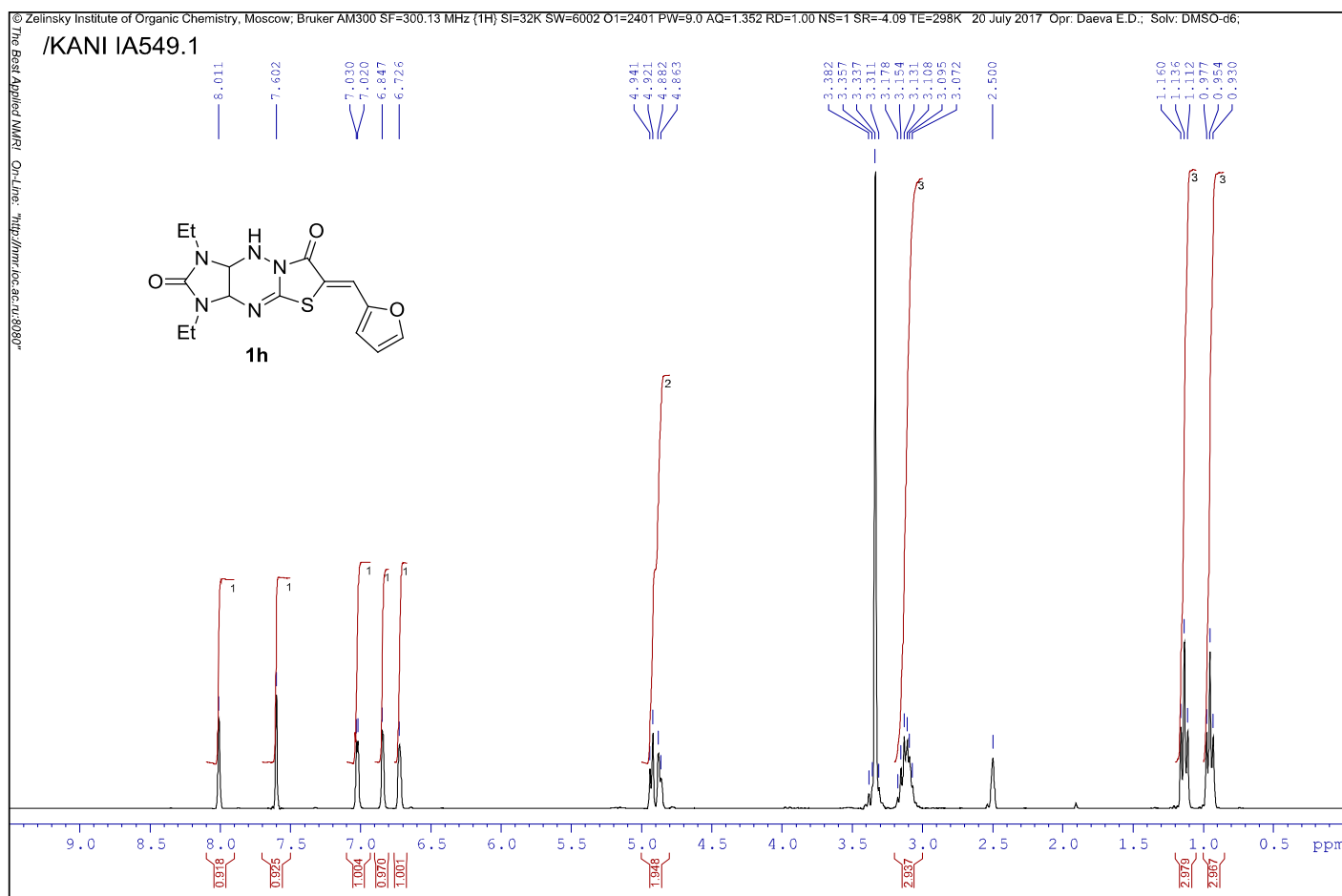
¹H NMR spectrum of **1g**



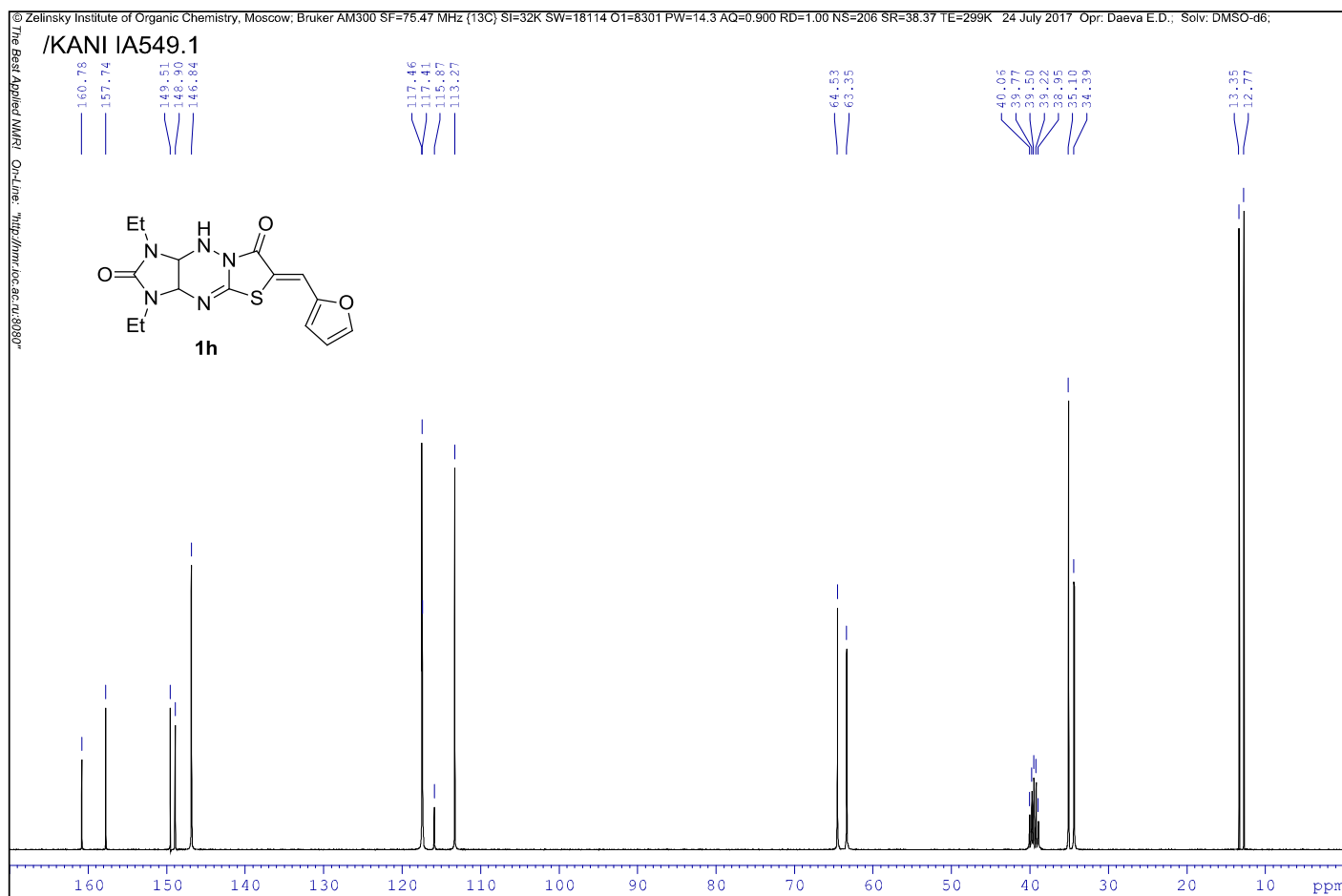
¹³C NMR spectrum of **1g**



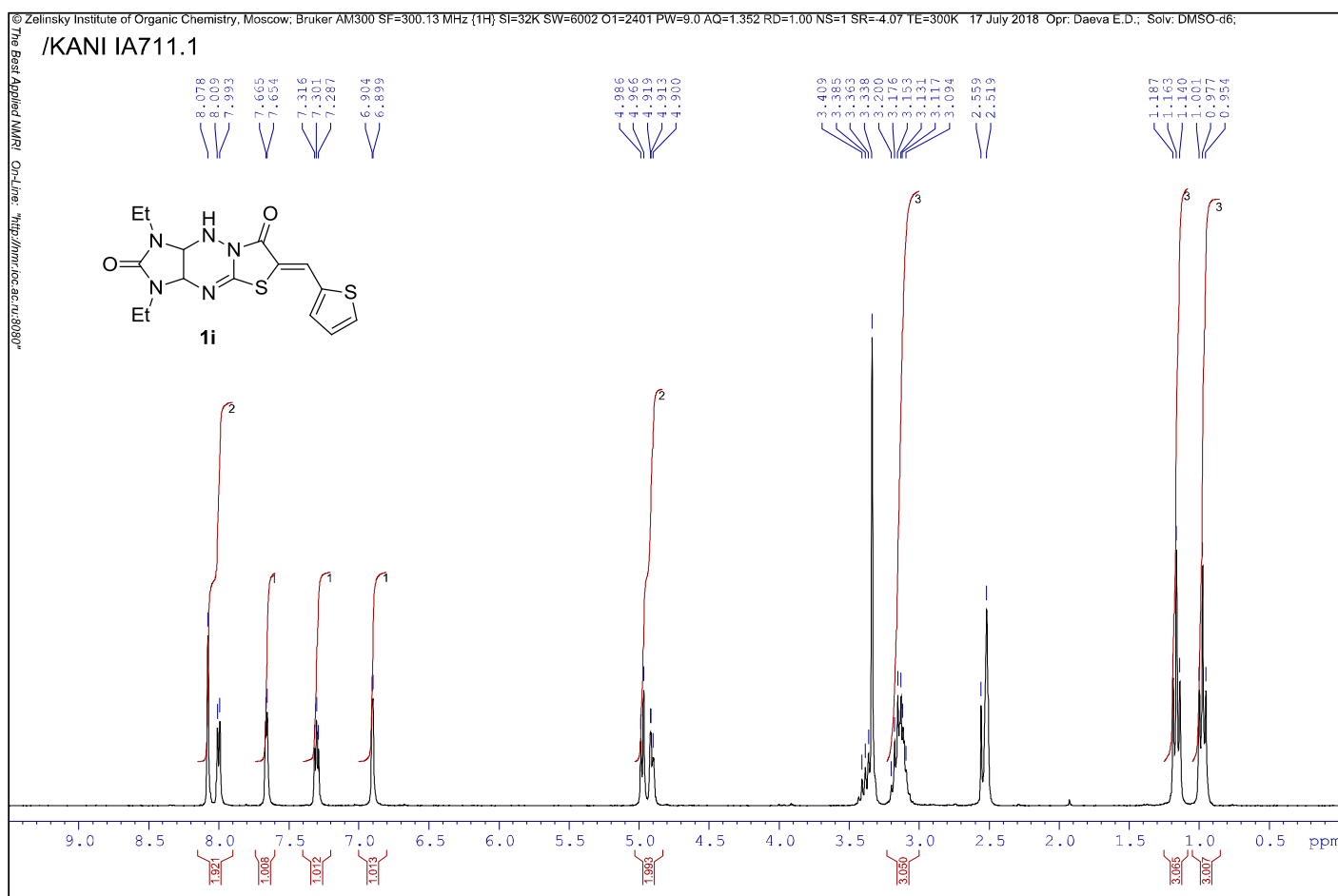
¹H NMR spectrum of **1h**



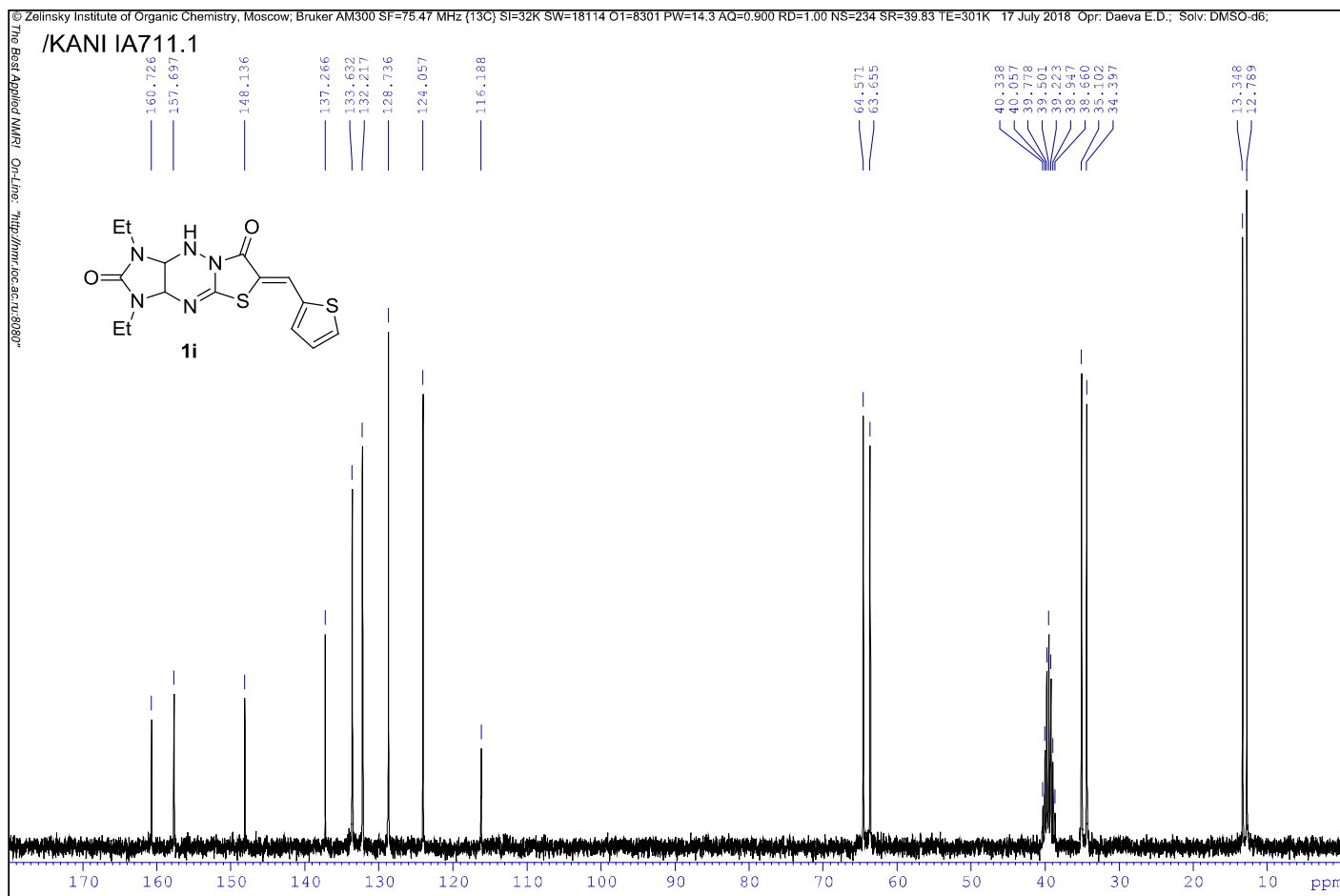
¹³C NMR spectrum of **1h**



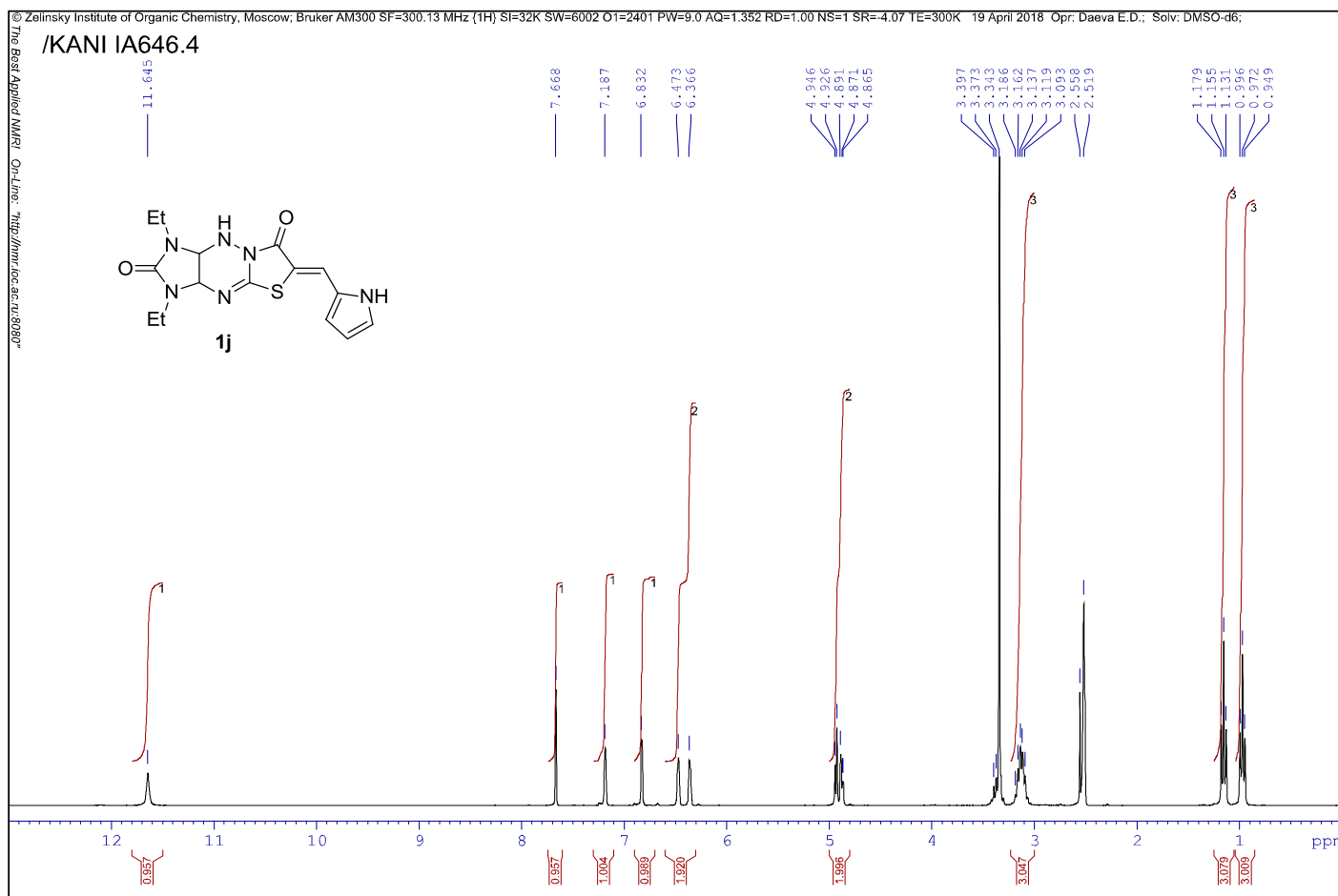
¹H NMR spectrum of **1i**



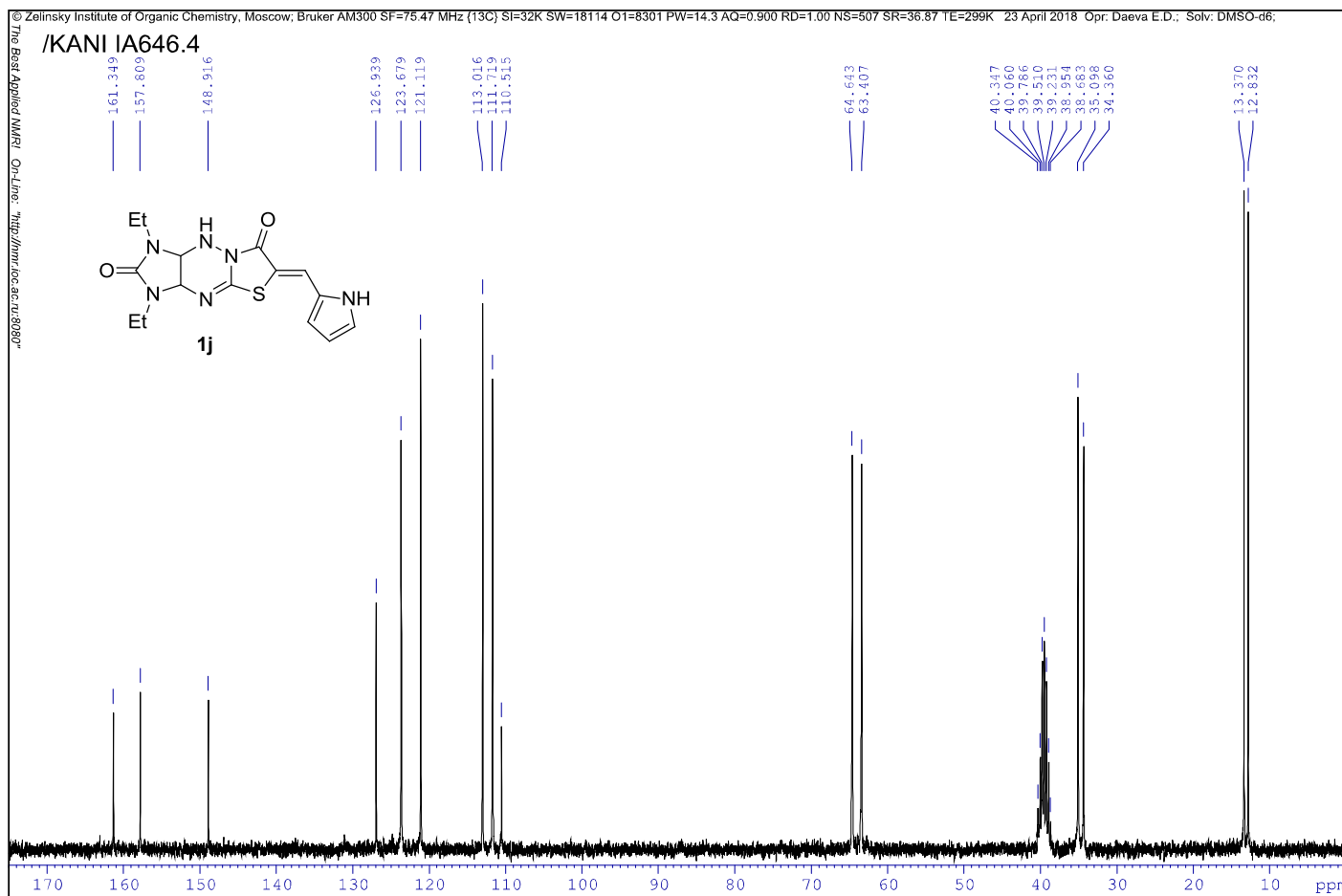
¹³C NMR spectrum of **1i**



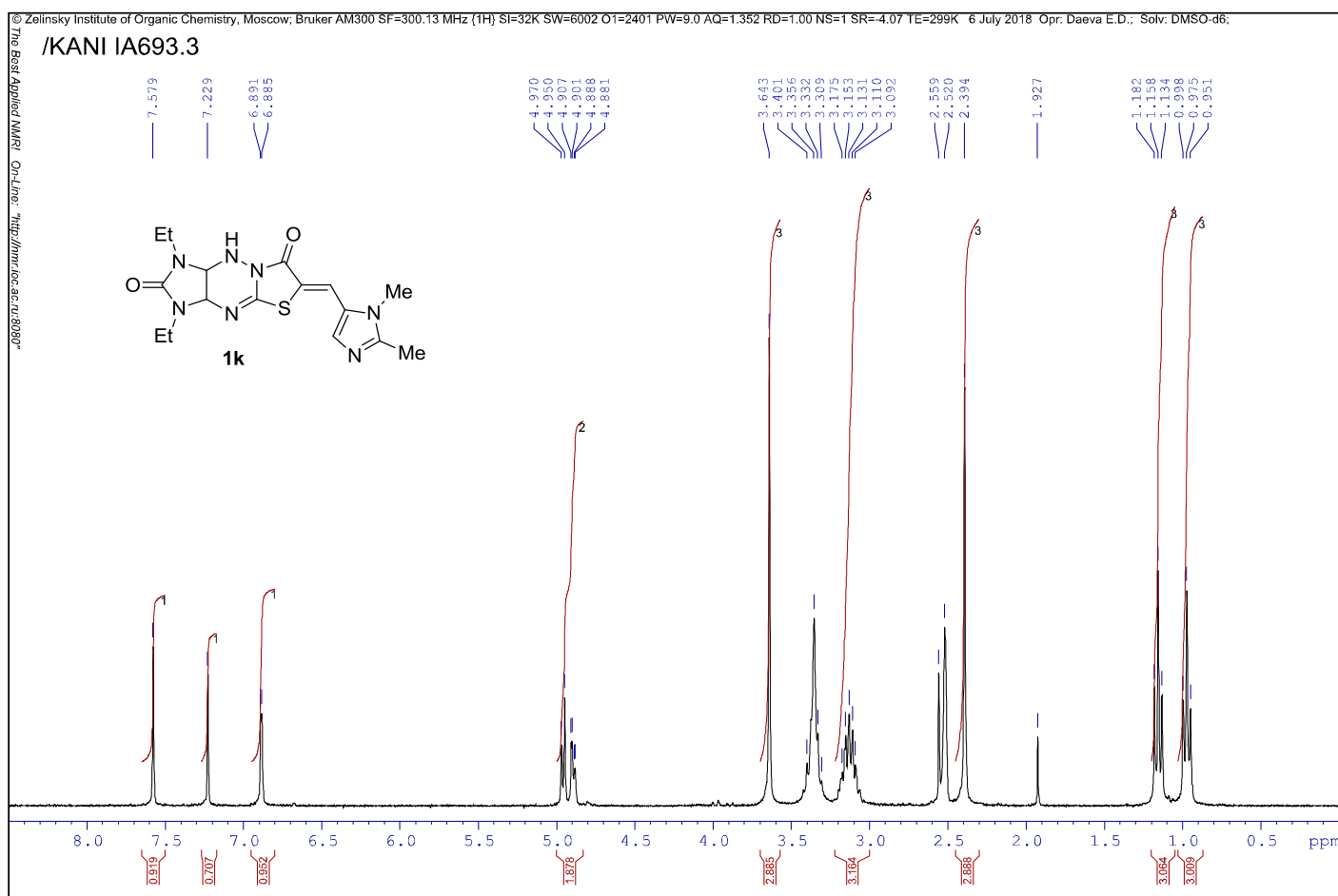
¹H NMR spectrum of **1j**



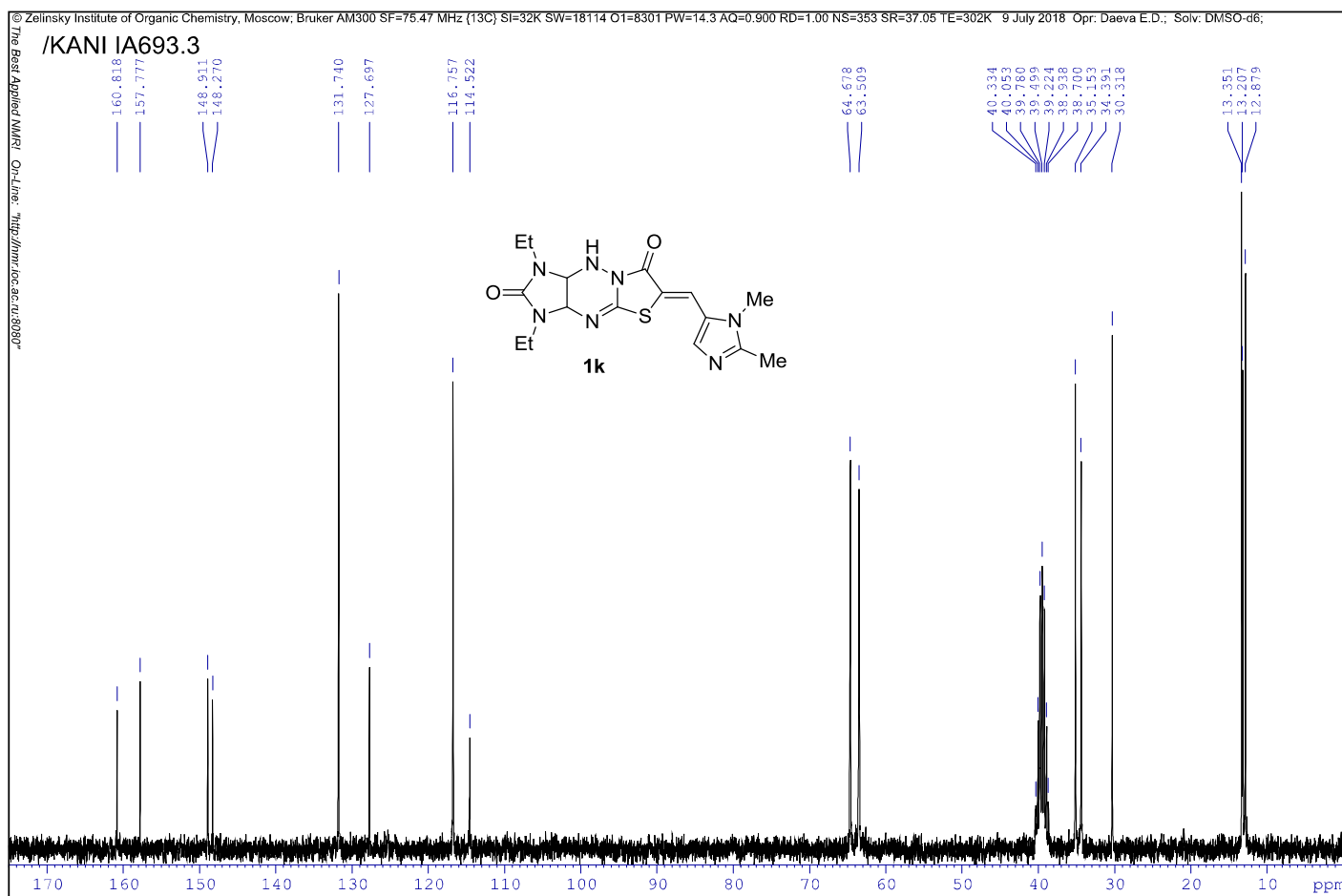
¹³C NMR spectrum of **1j**



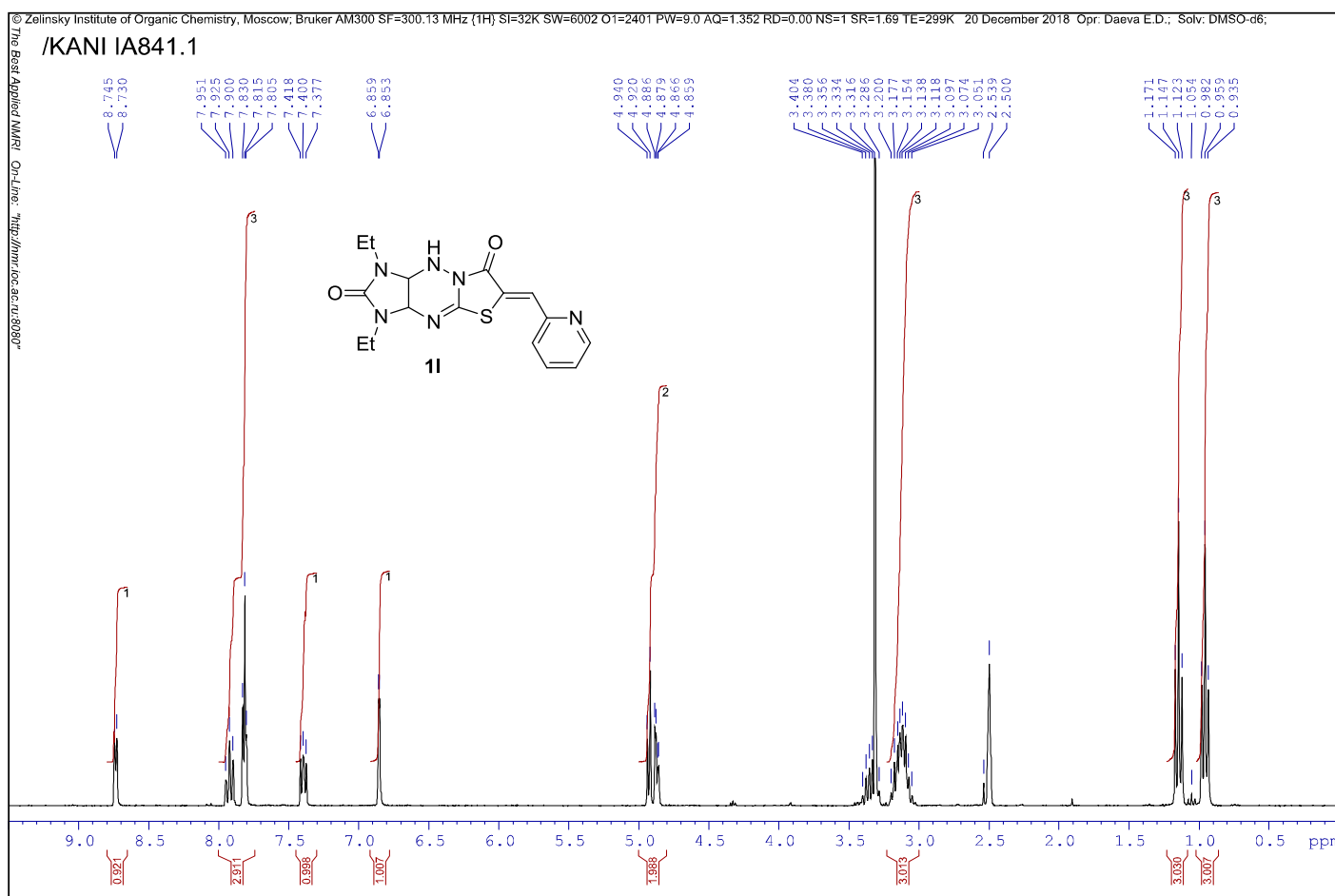
¹H NMR spectrum of **1k**



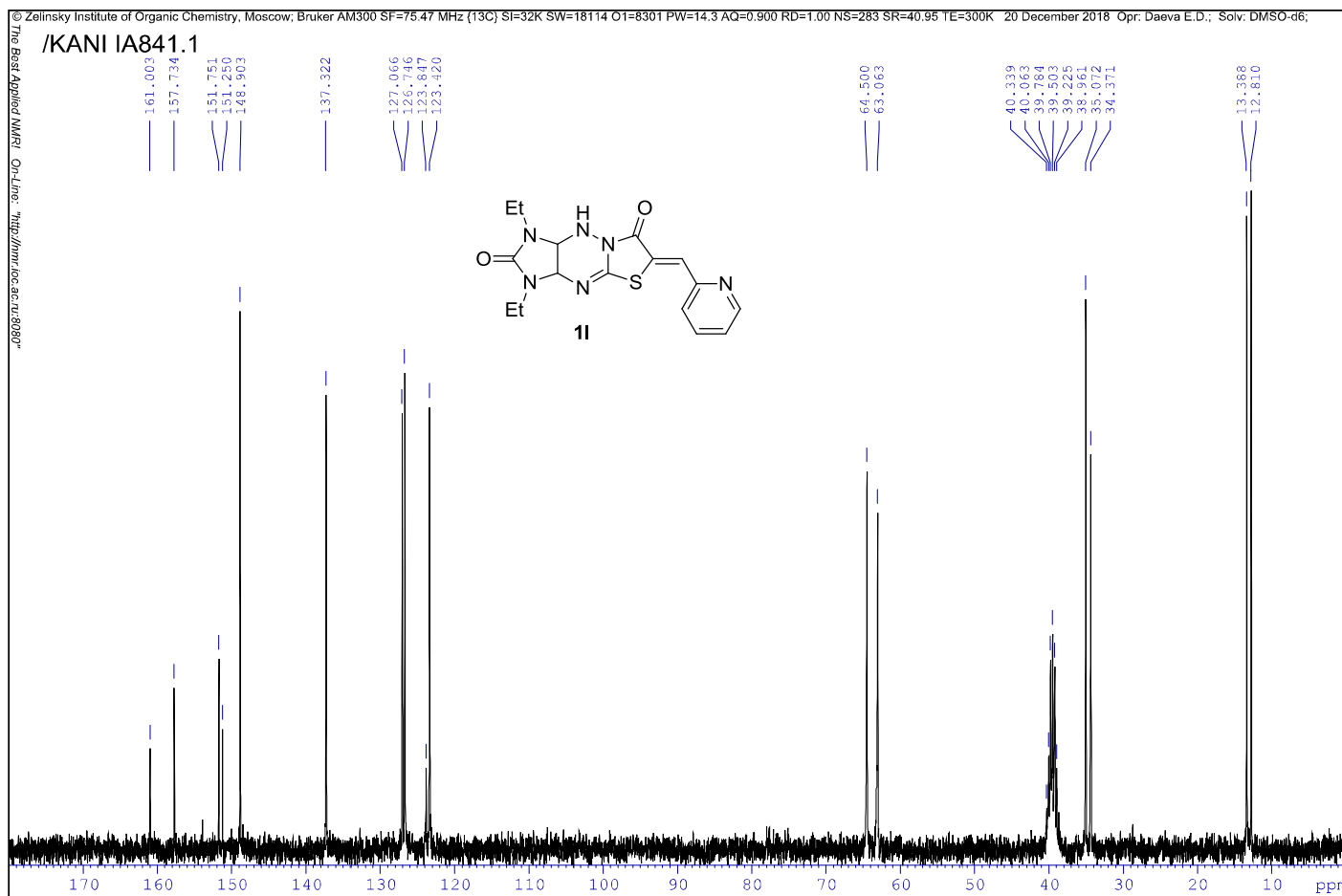
¹³C NMR spectrum of **1k**



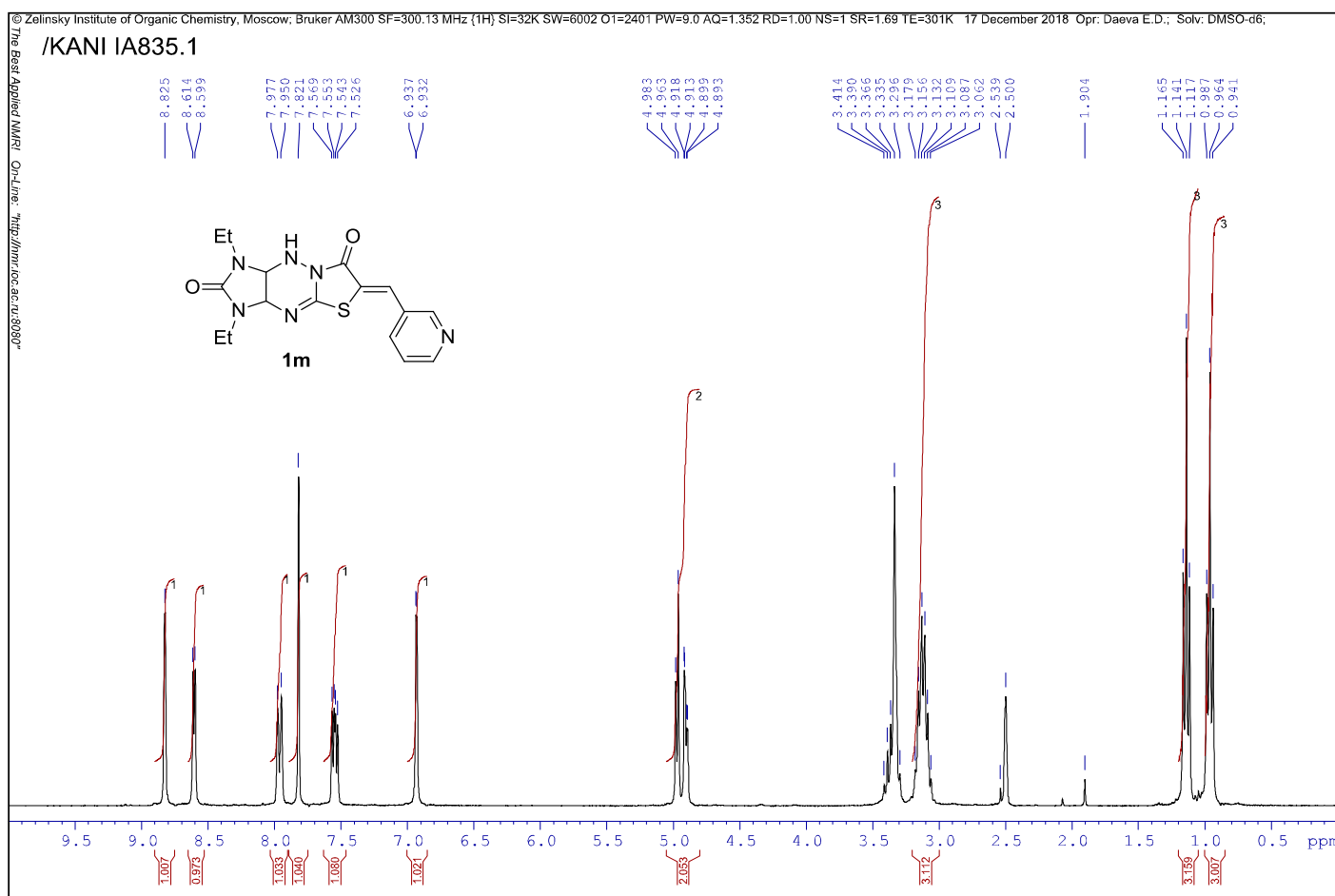
¹H NMR spectrum of **11**



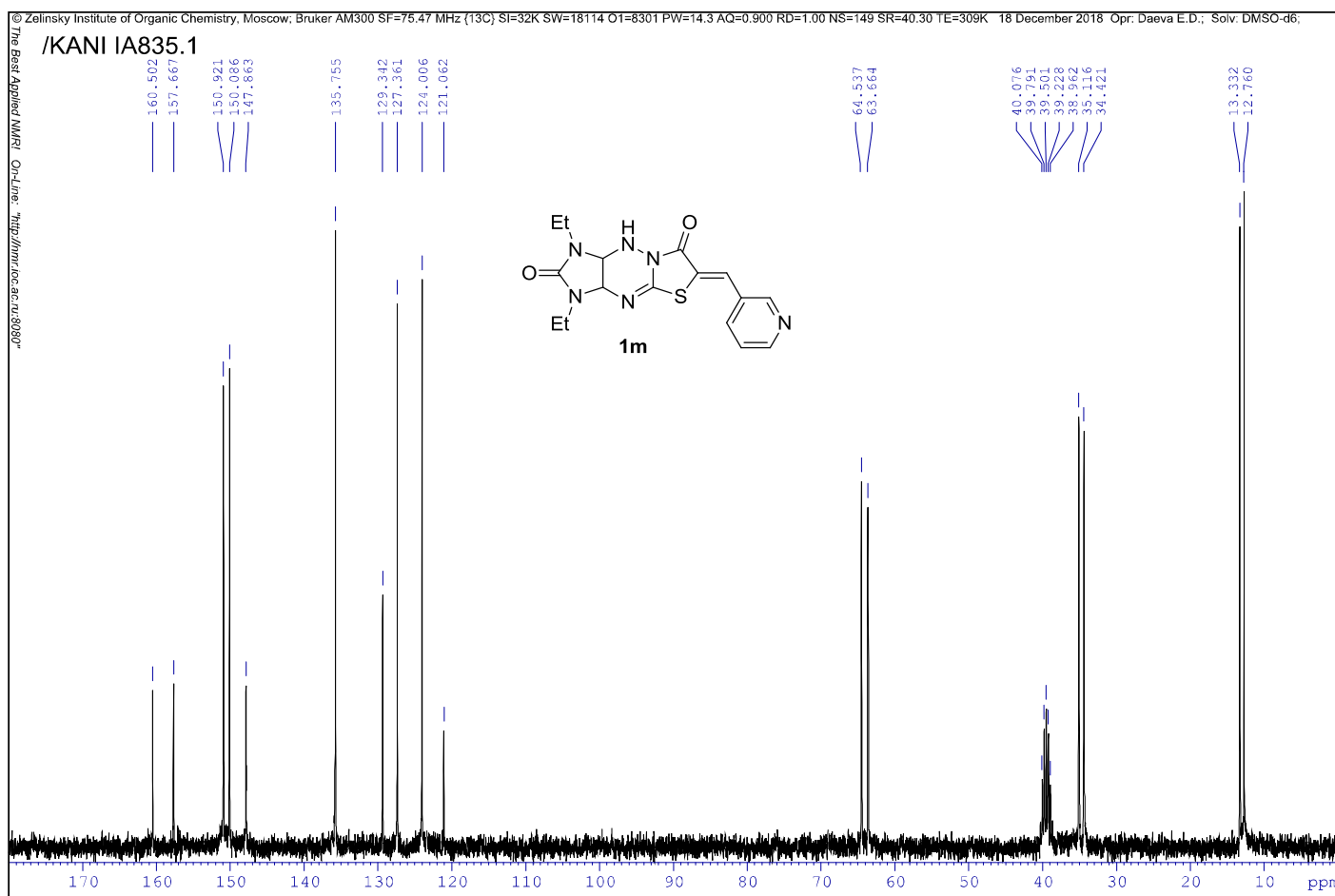
¹³C NMR spectrum of **11**



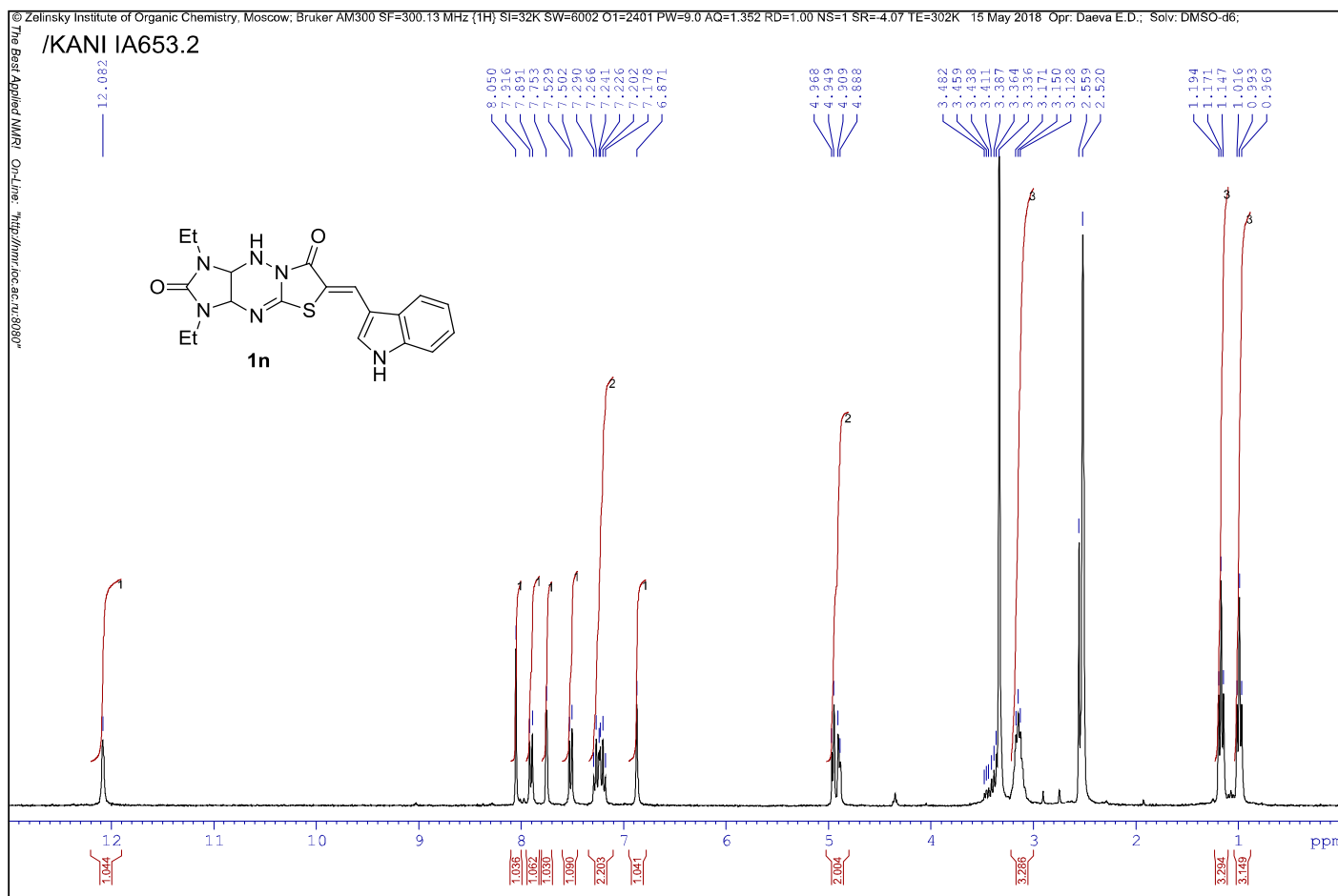
¹H NMR spectrum of **1m**



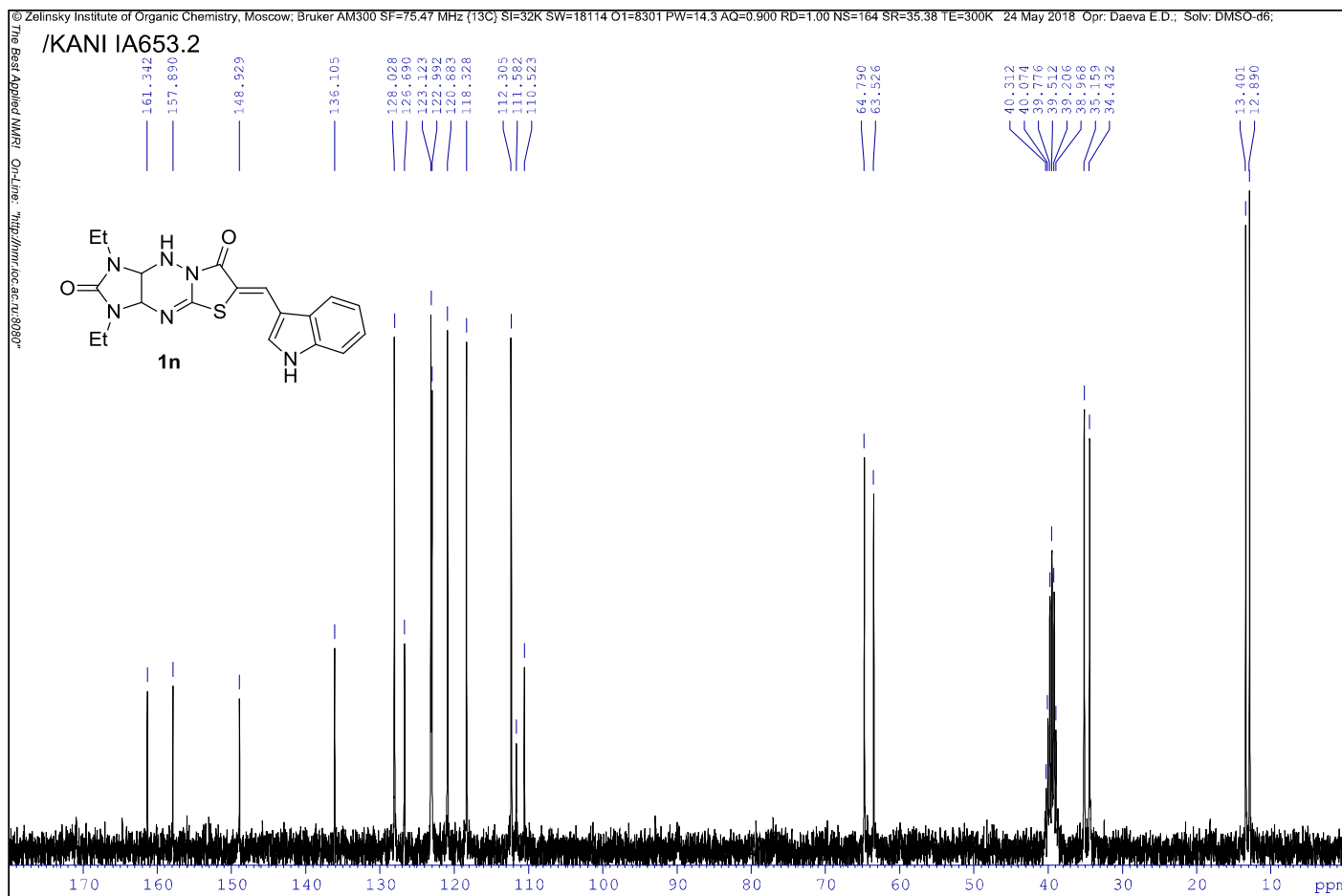
¹³C NMR spectrum of **1m**



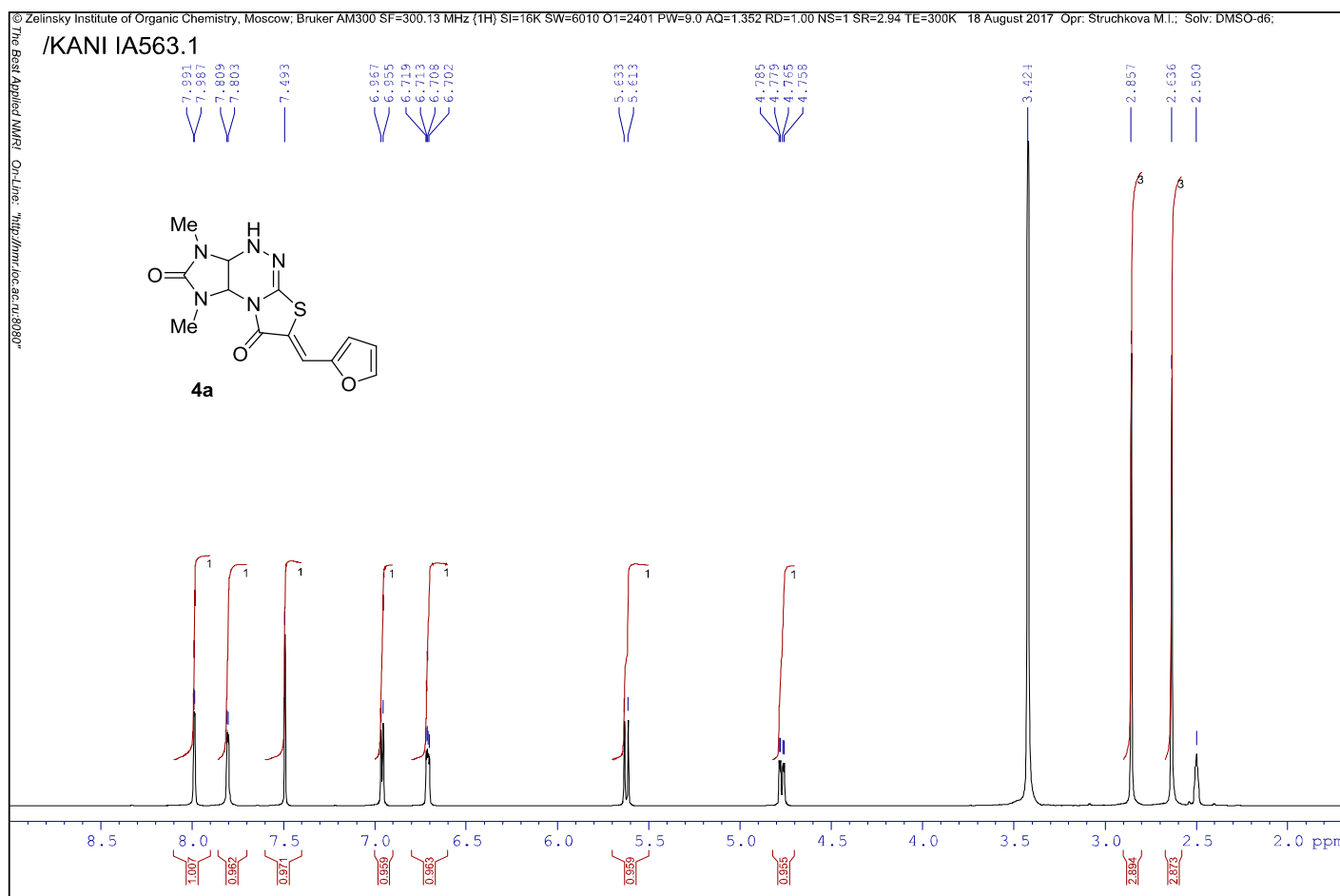
¹H NMR spectrum of **1n**



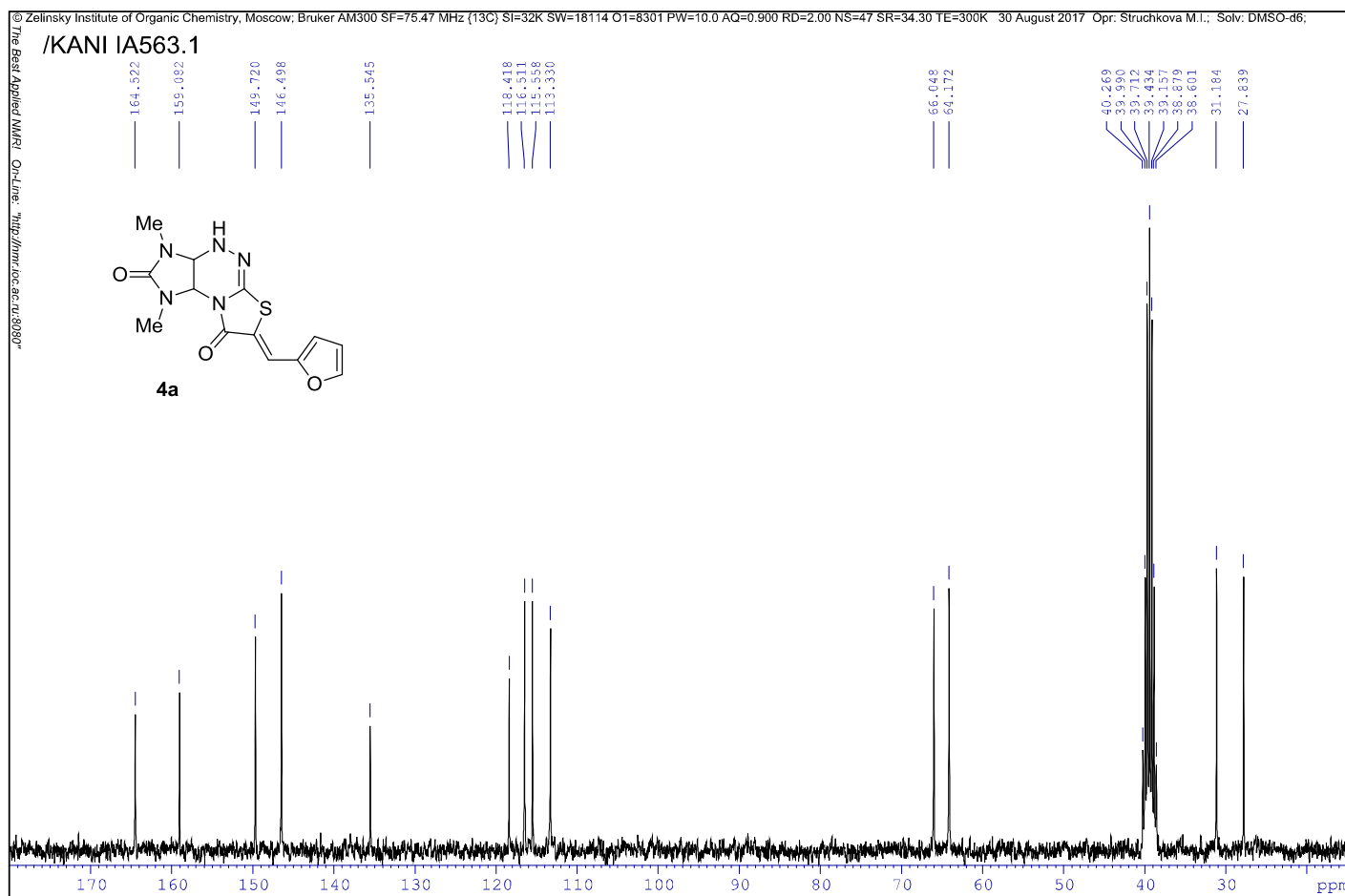
¹³C NMR spectrum of **1n**



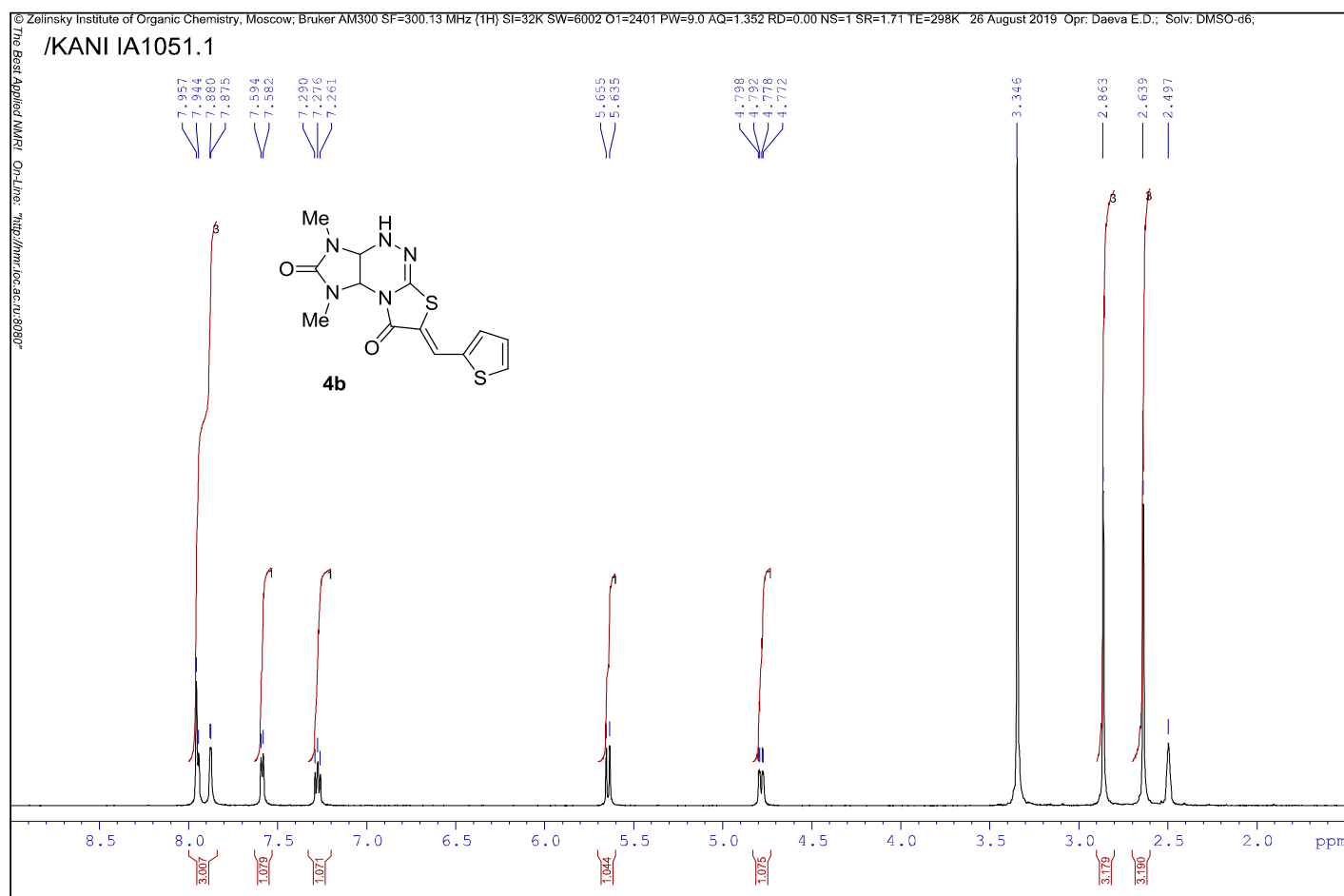
¹H NMR spectrum of 4a



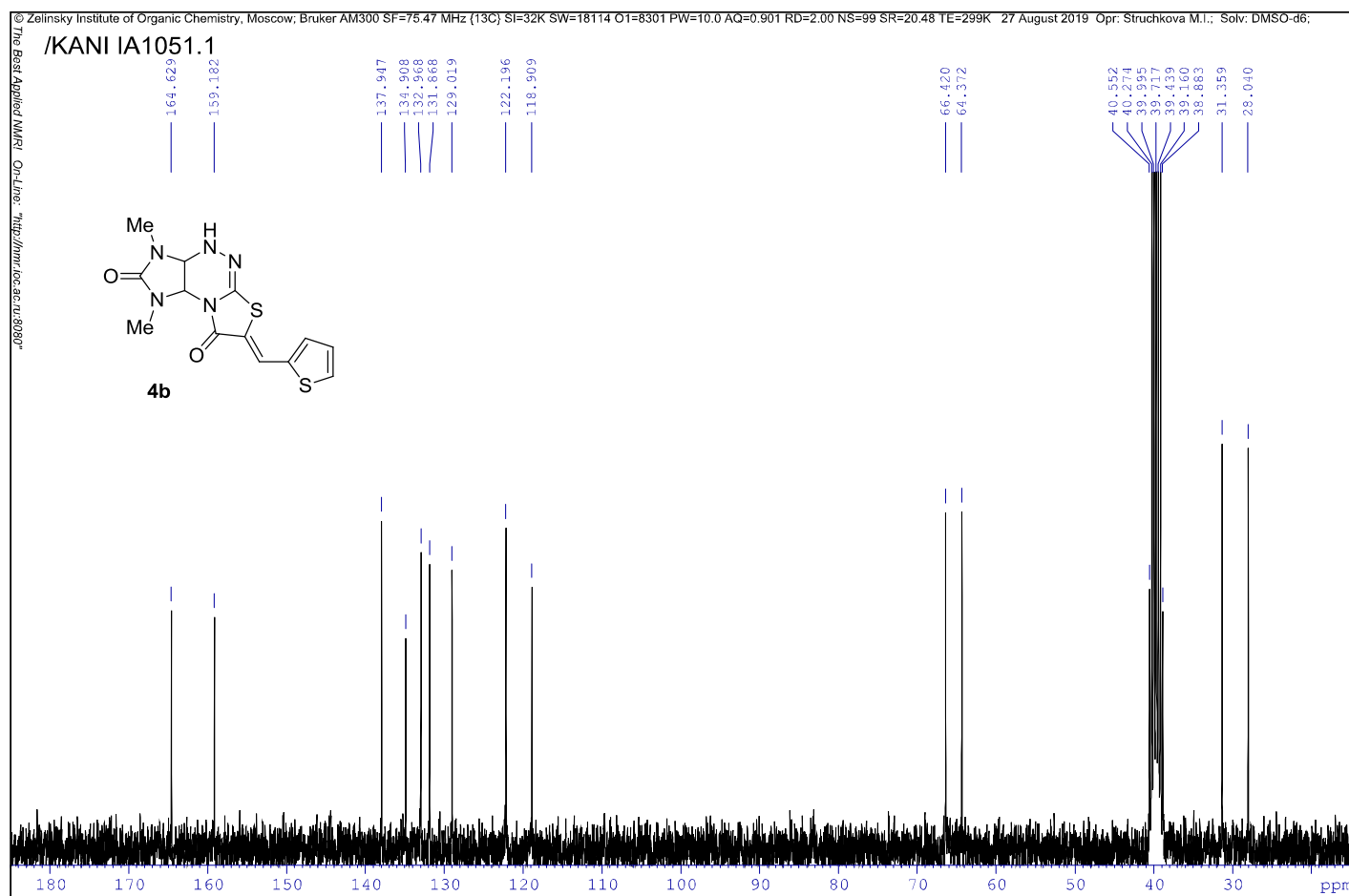
¹³C NMR spectrum of 4a



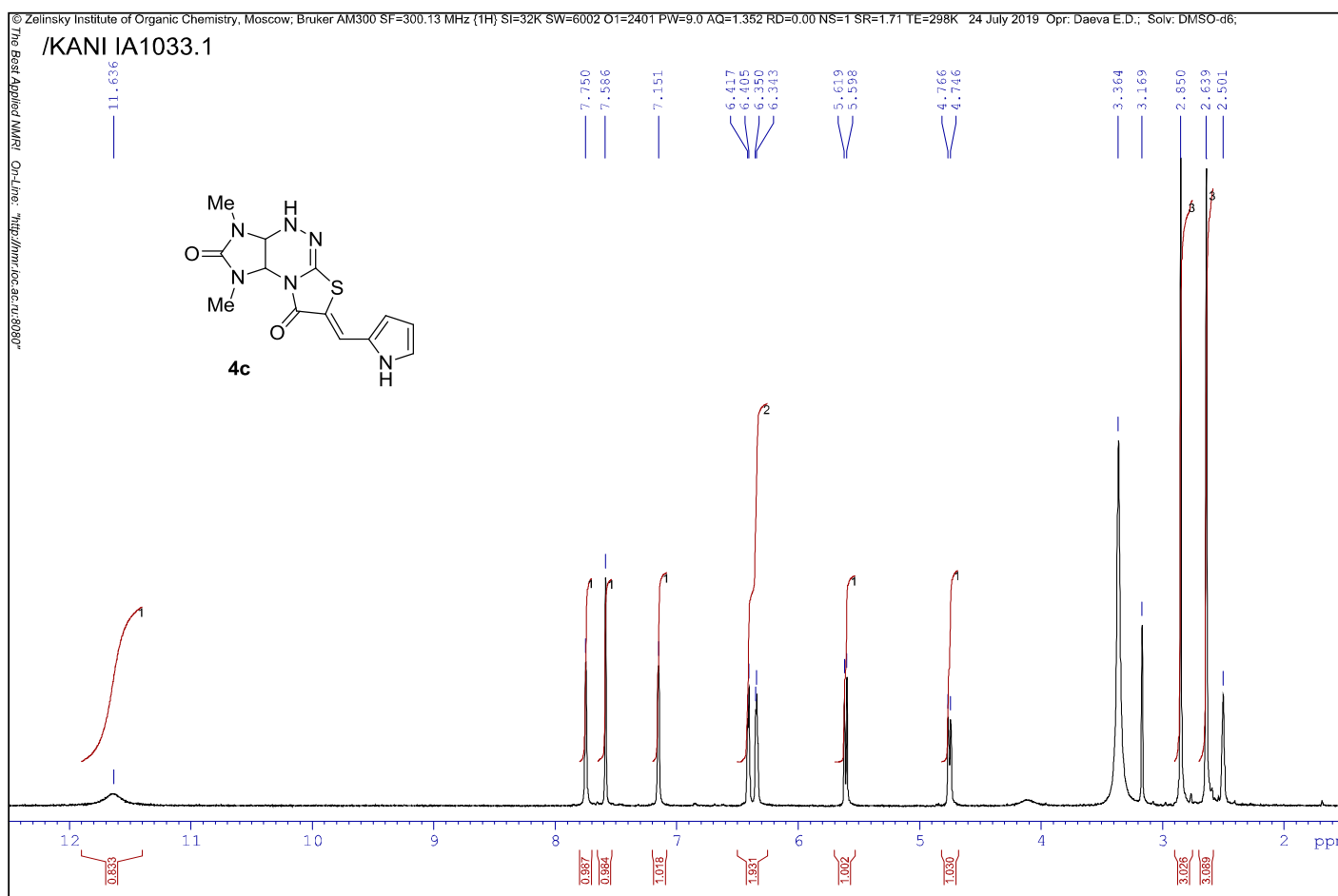
¹H NMR spectrum of **4b**



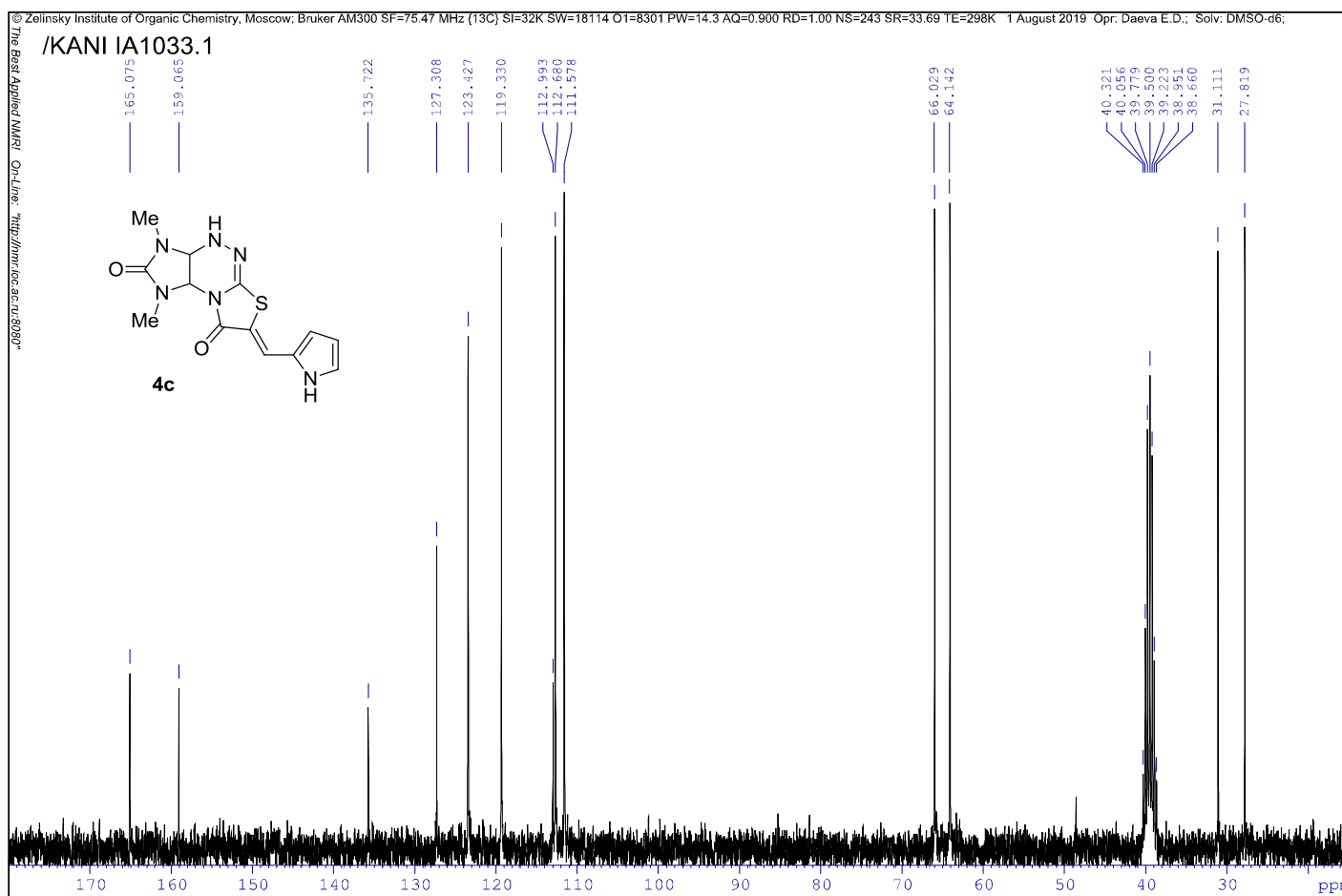
¹³C NMR spectrum of **4b**



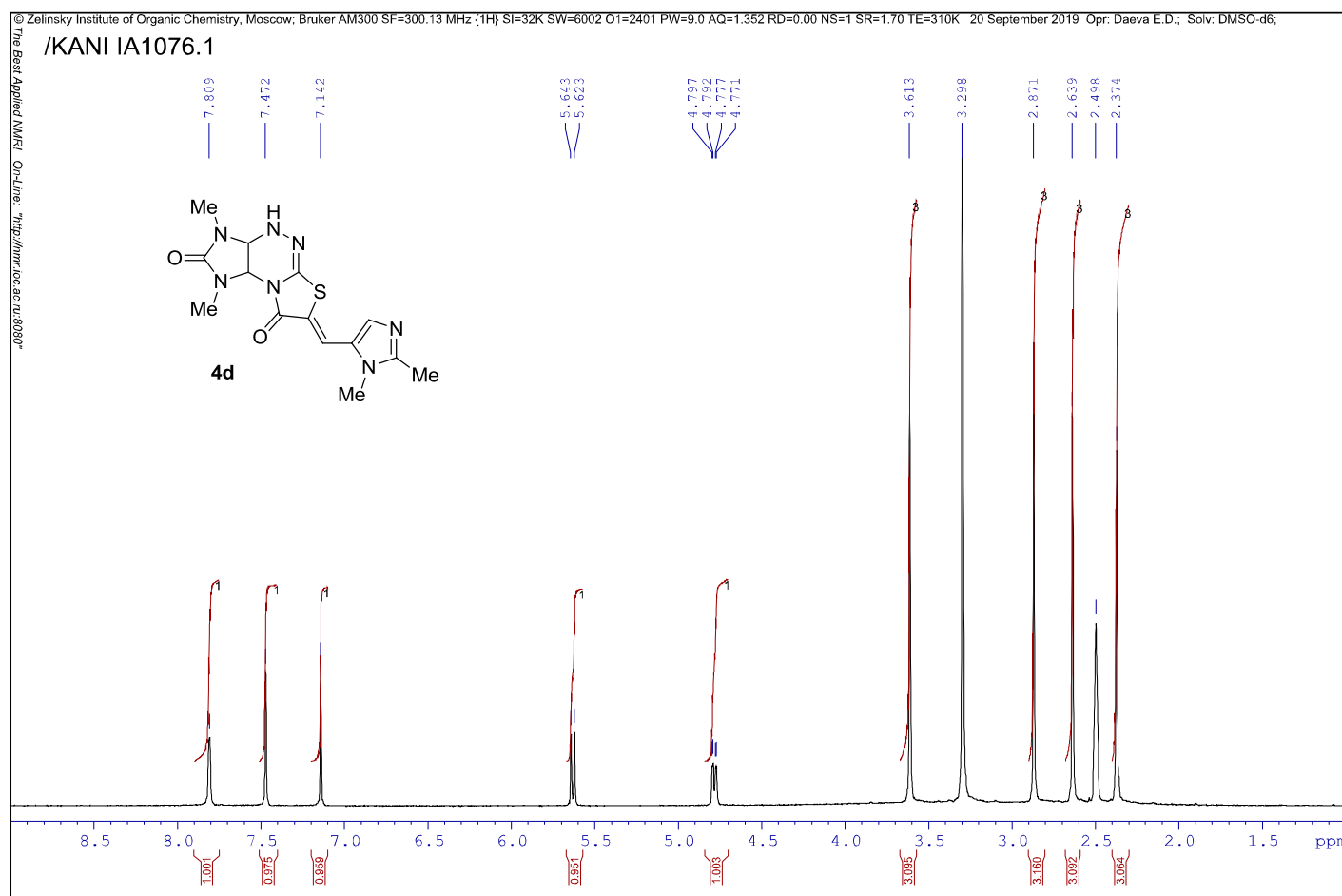
¹H NMR spectrum of 4c



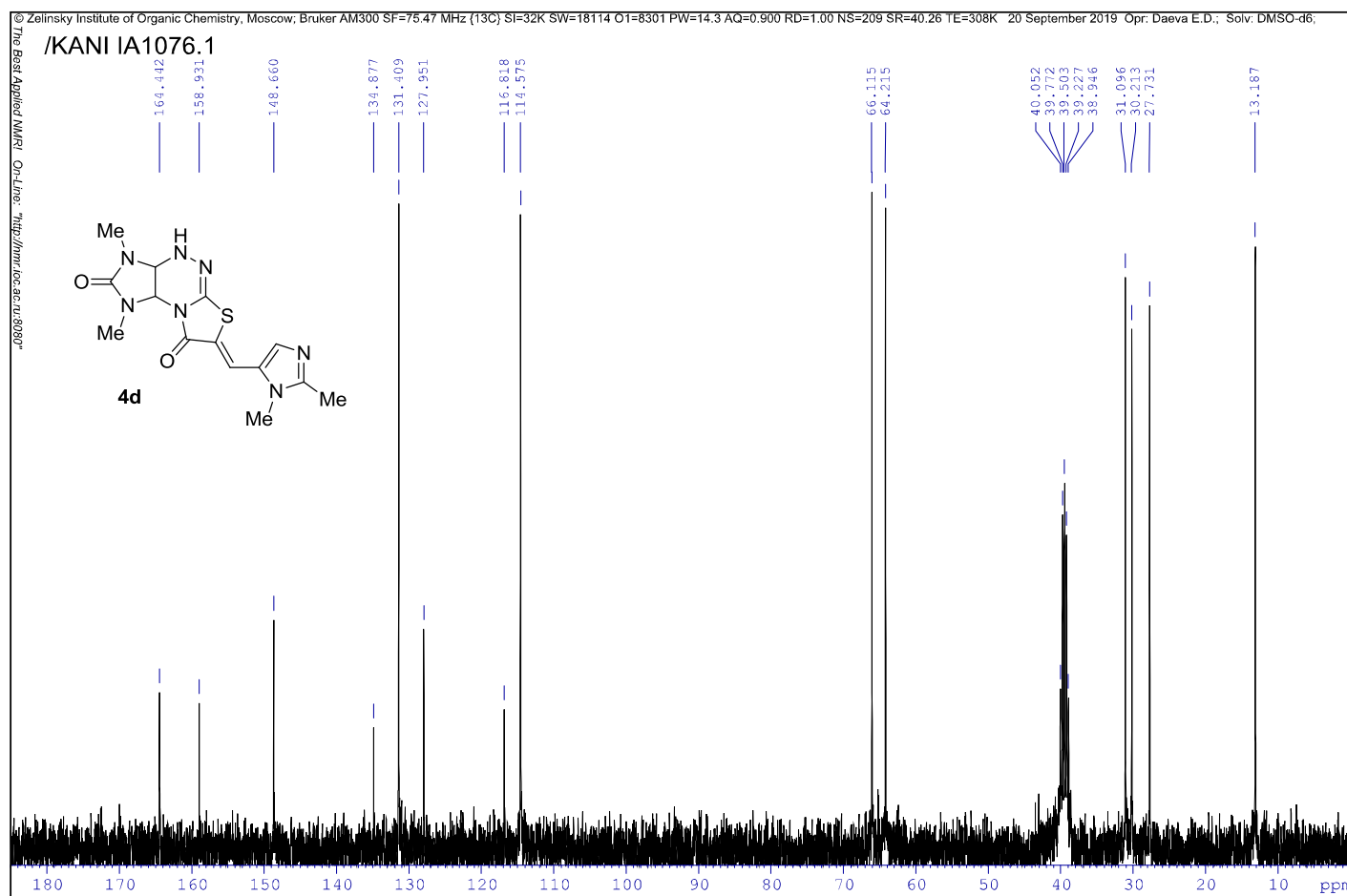
¹³C NMR spectrum of 4c



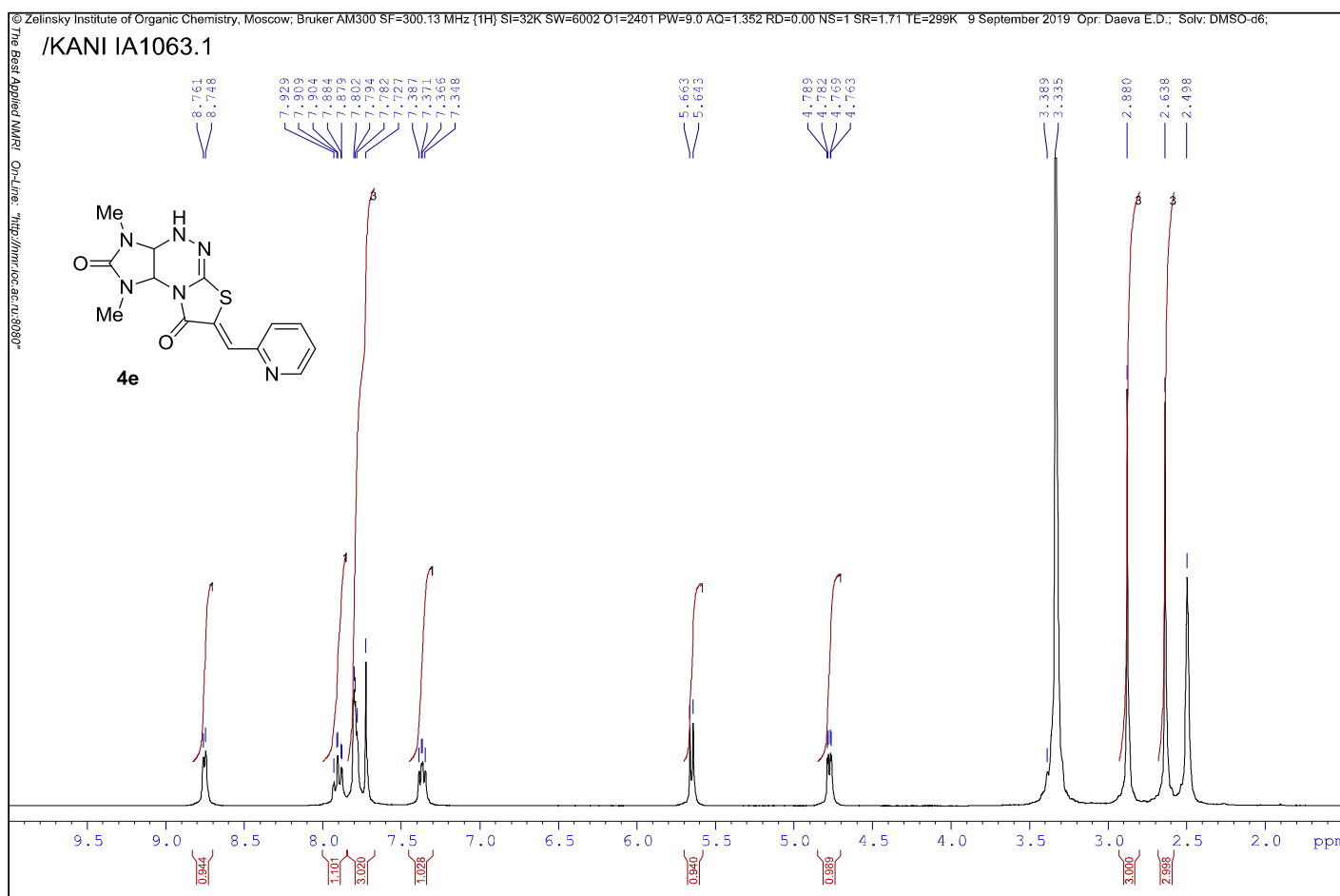
¹H NMR spectrum of 4d



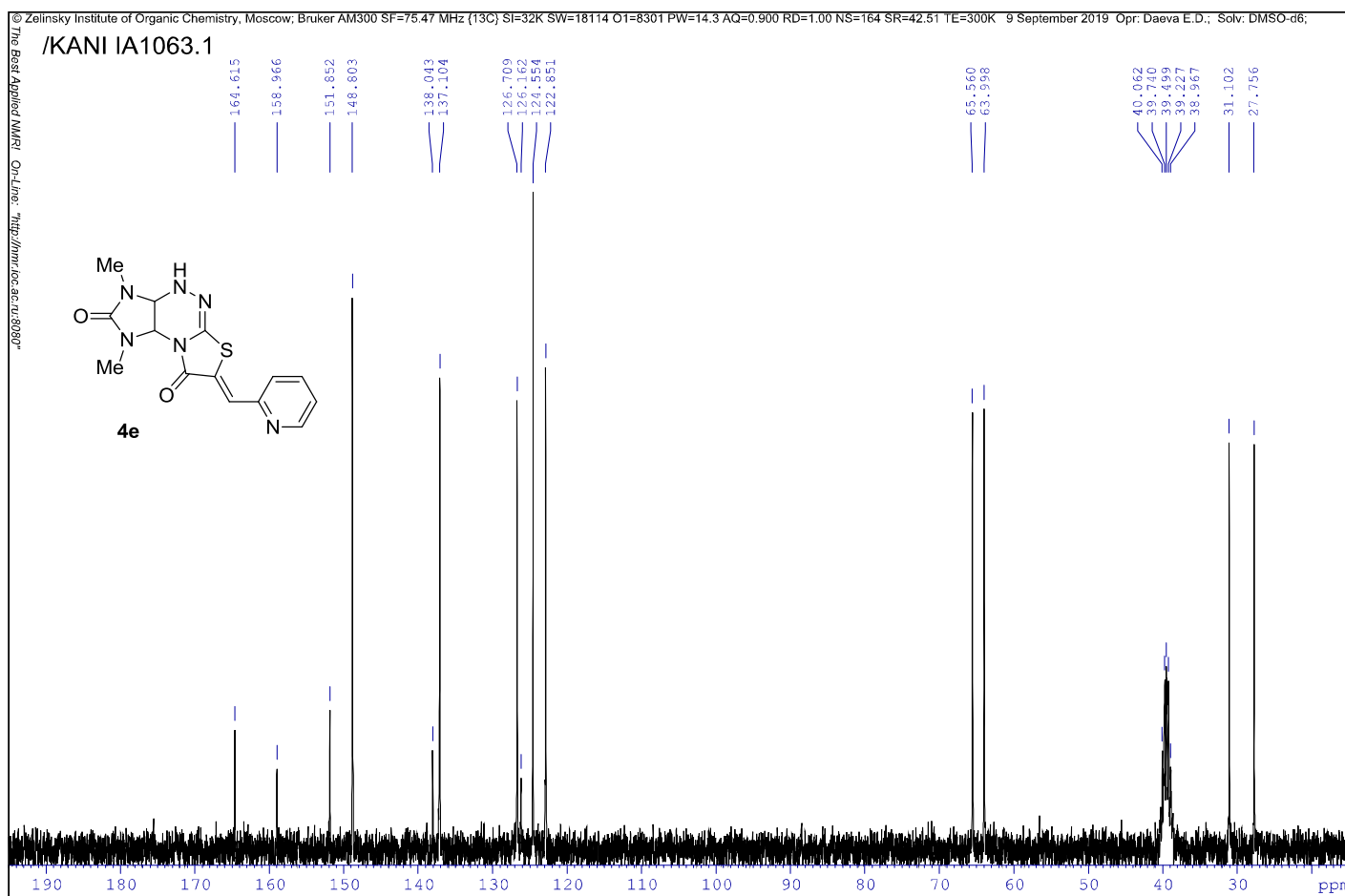
¹³C NMR spectrum of 4d



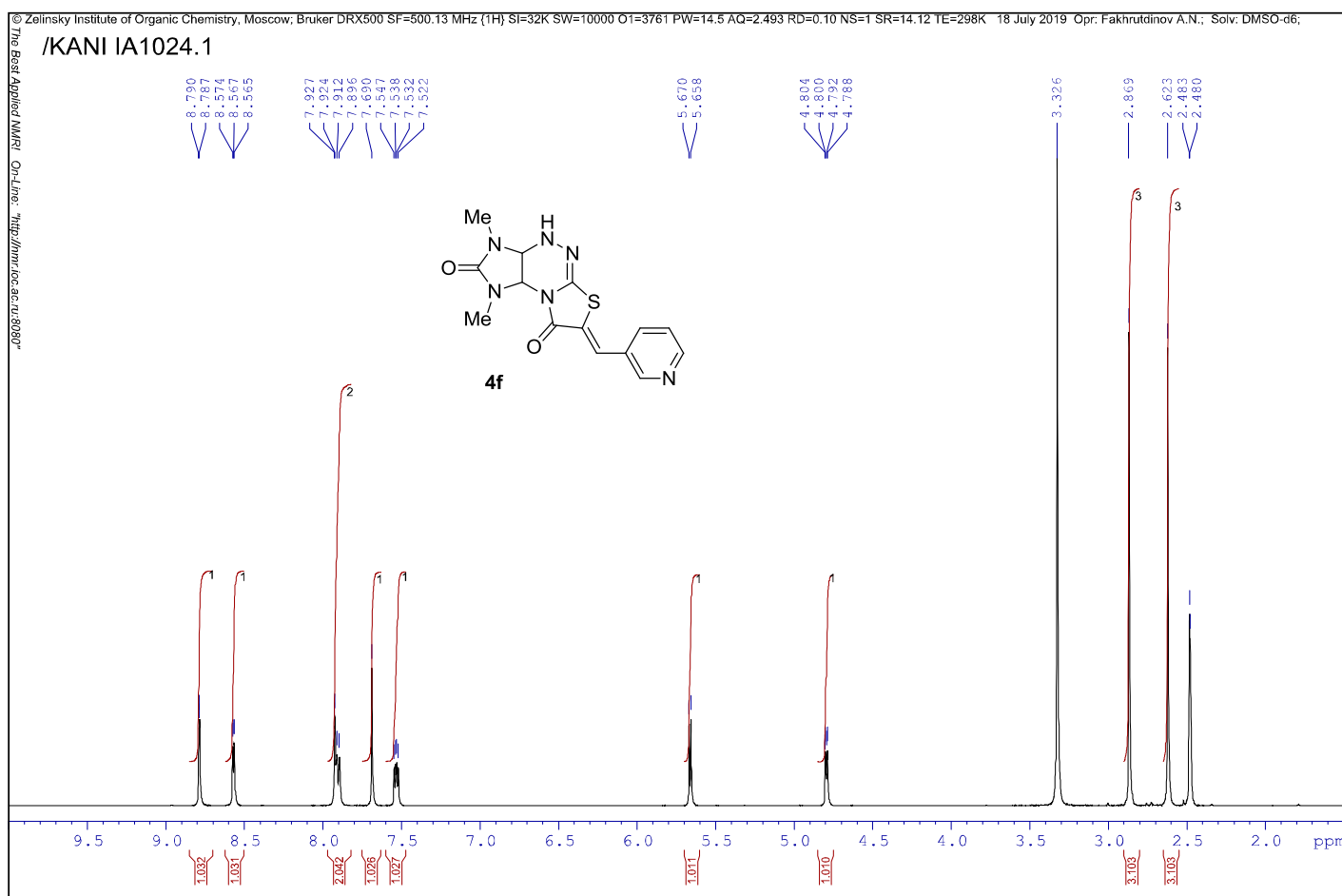
¹H NMR spectrum of 4e



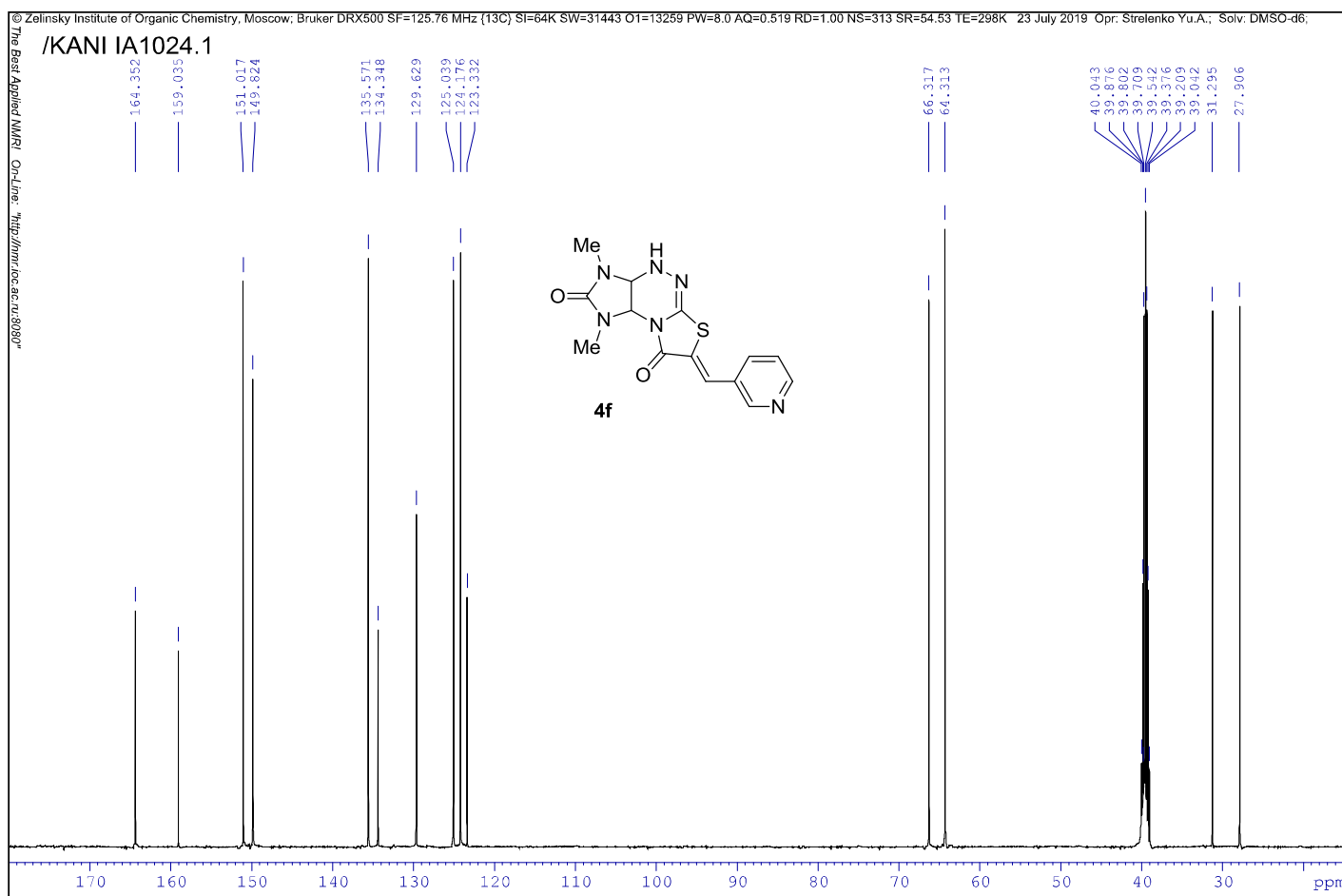
¹³C NMR spectrum of 4e



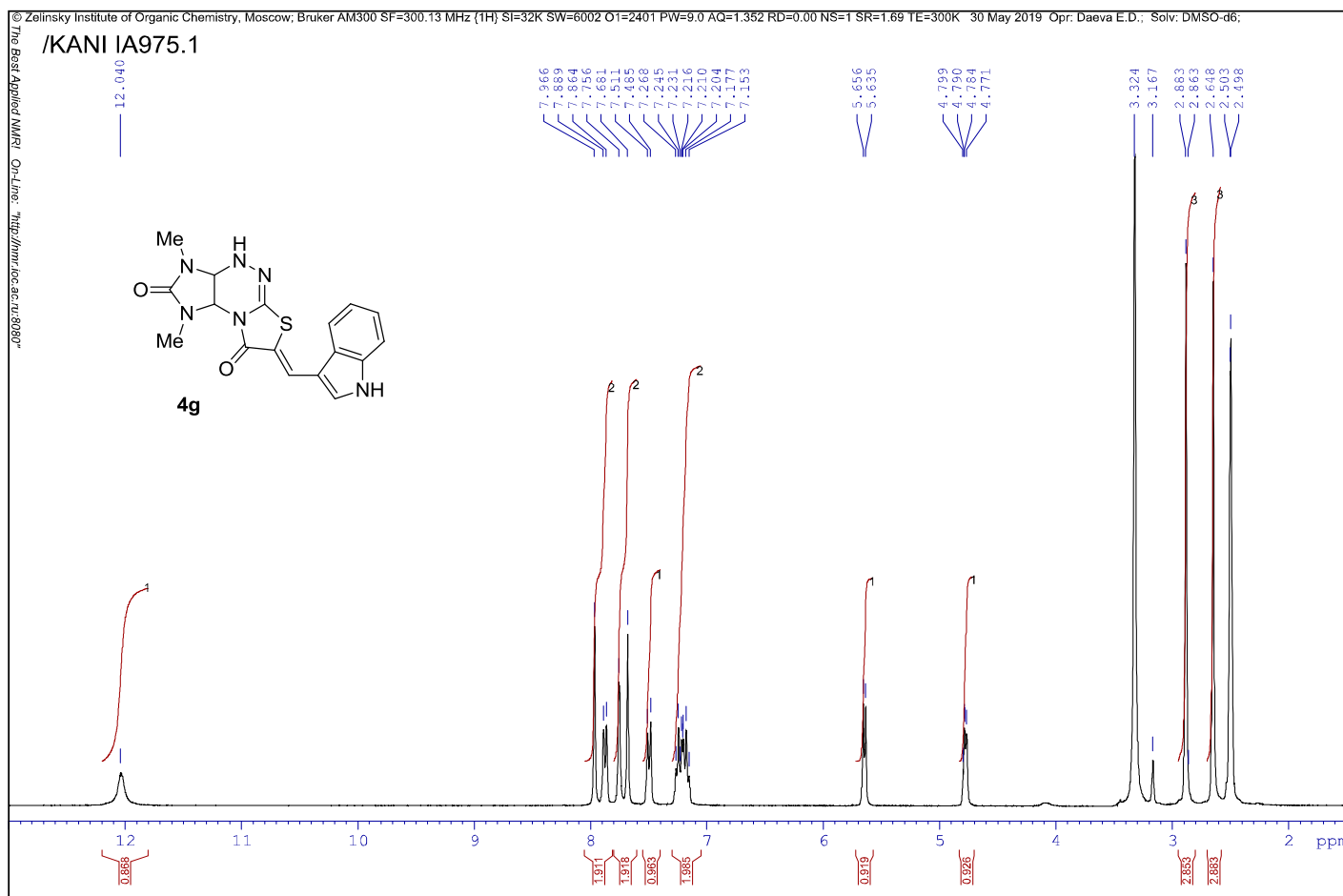
¹H NMR spectrum of **4f**



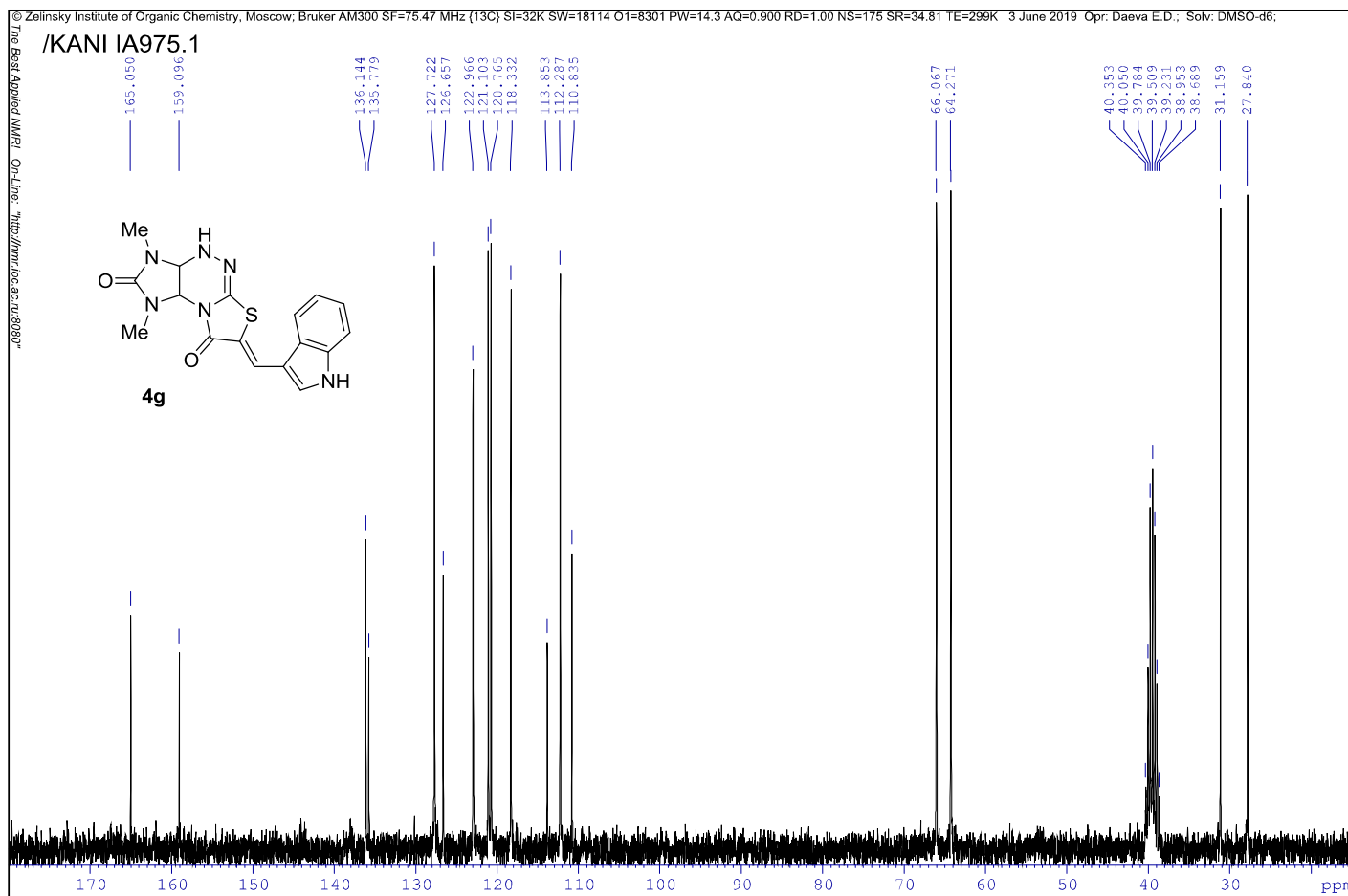
¹³C NMR spectrum of **4f**



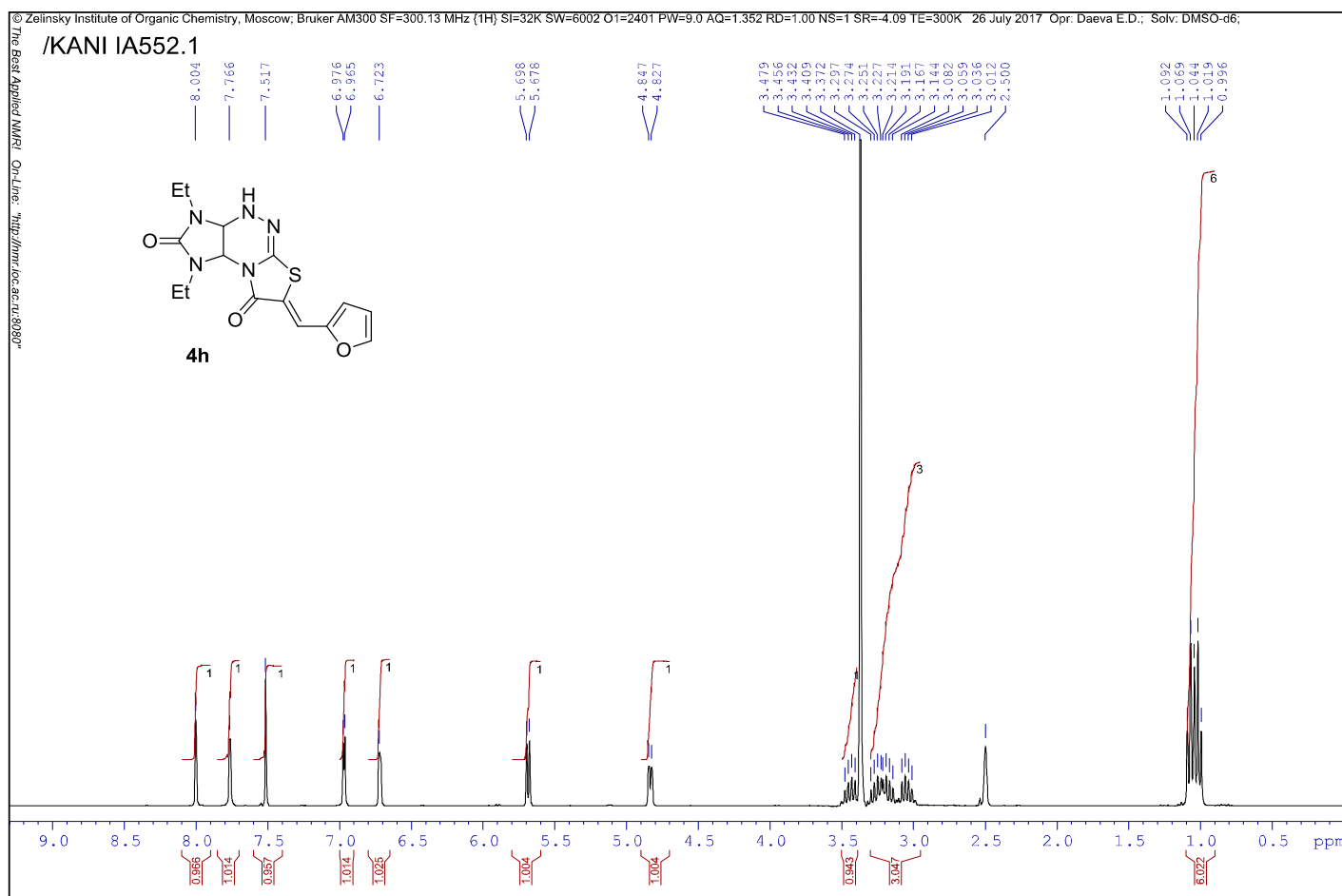
¹H NMR spectrum of **4g**



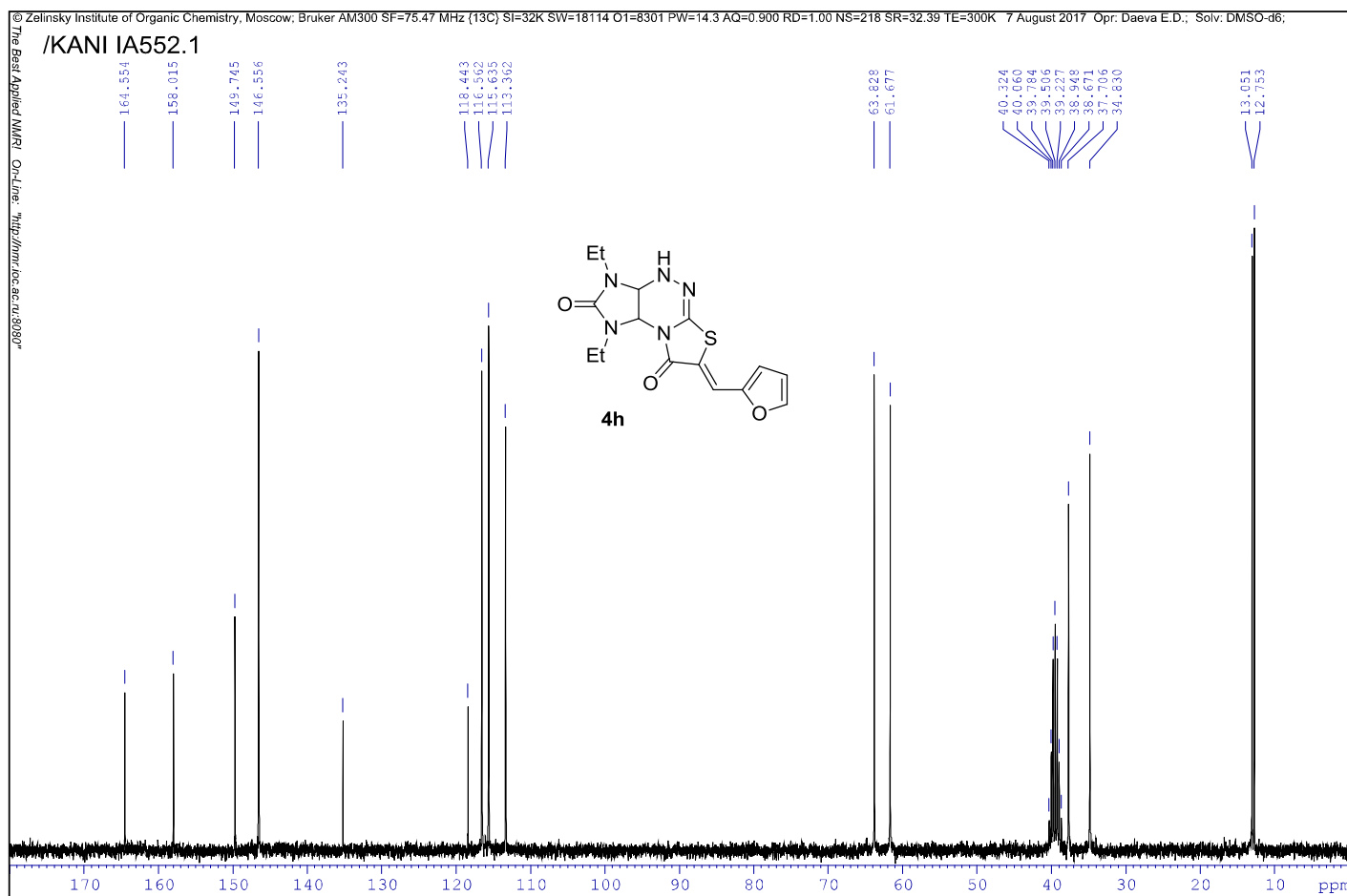
¹³C NMR spectrum of **4g**



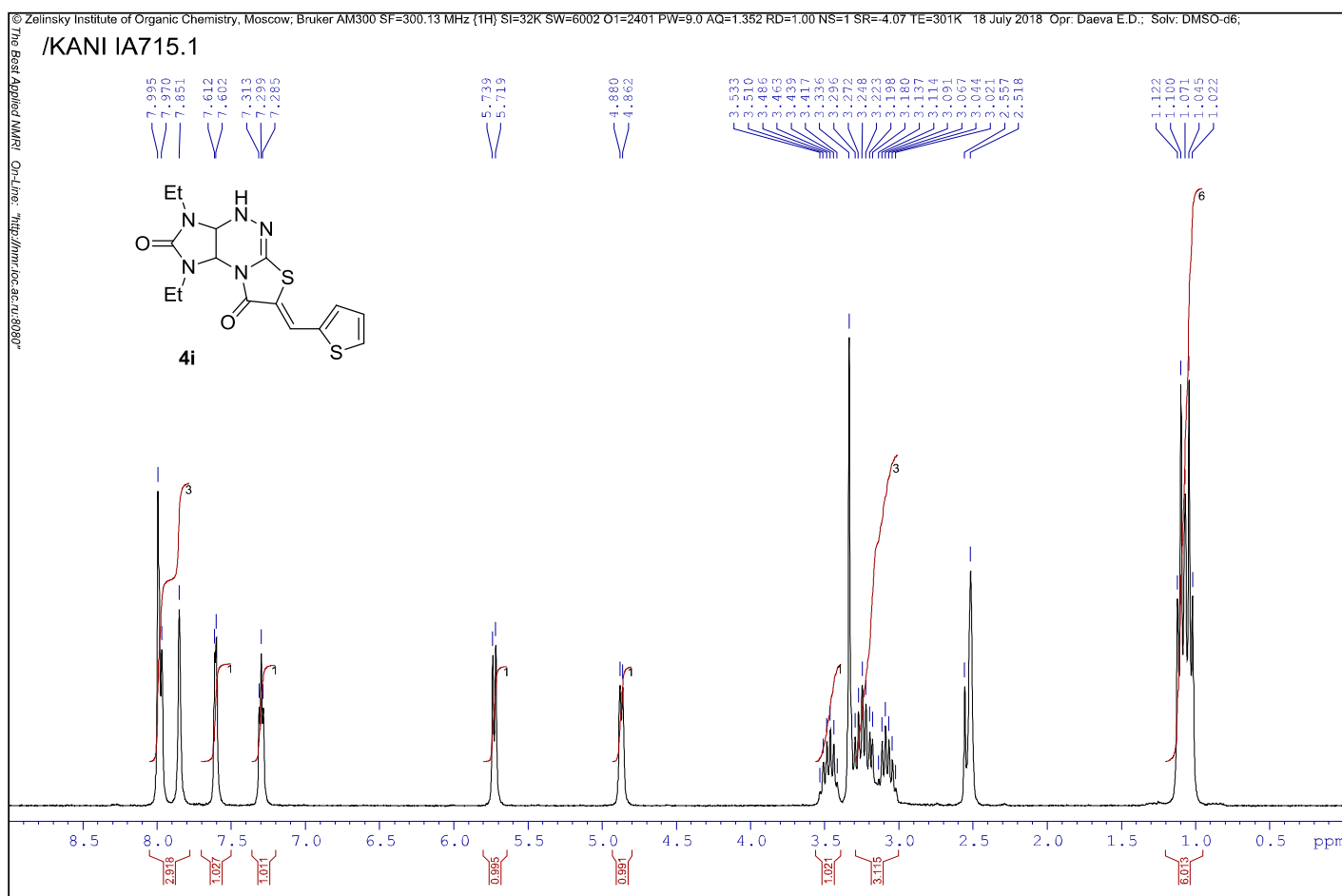
¹H NMR spectrum of 4h



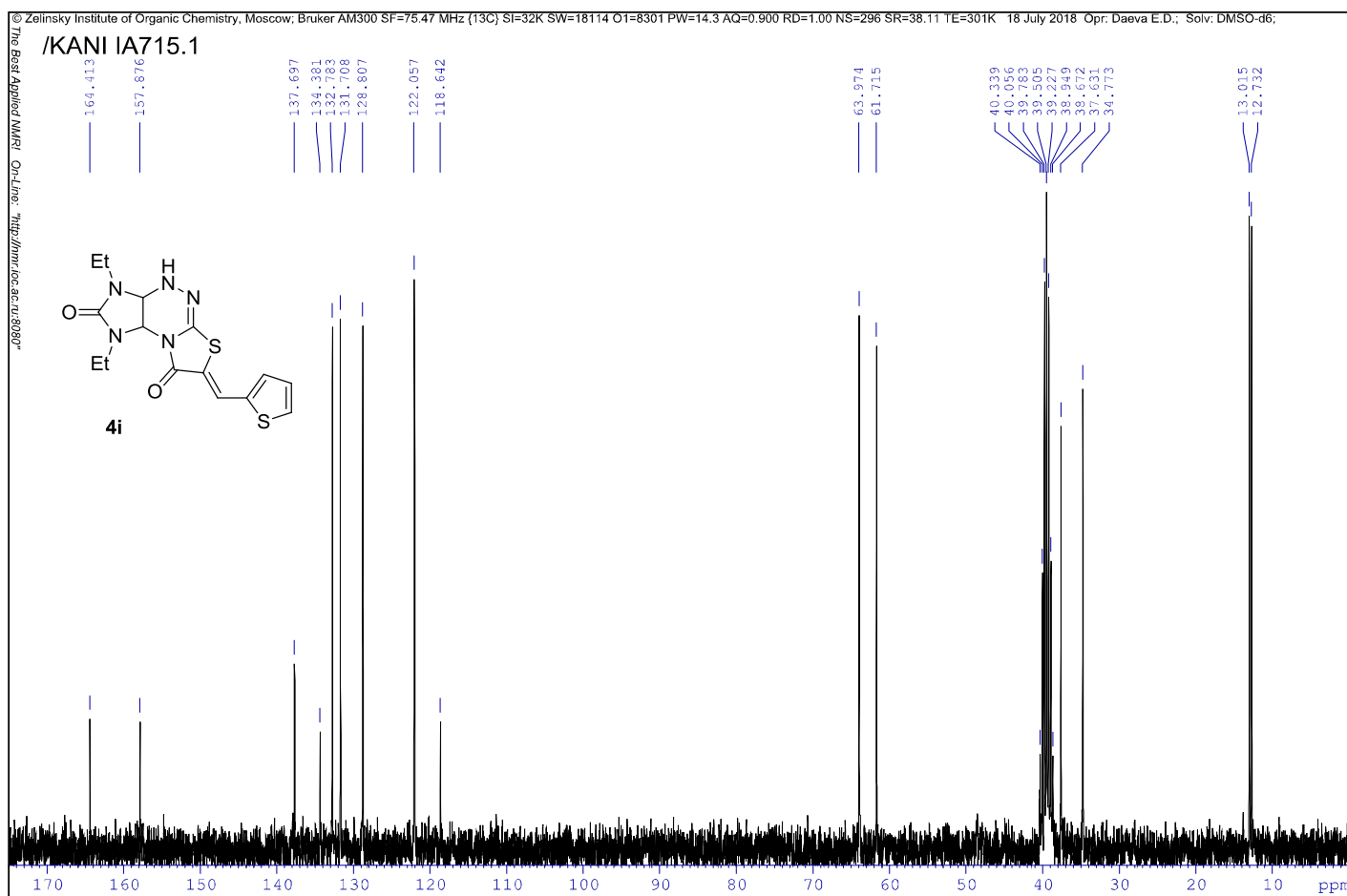
¹³C NMR spectrum of 4h



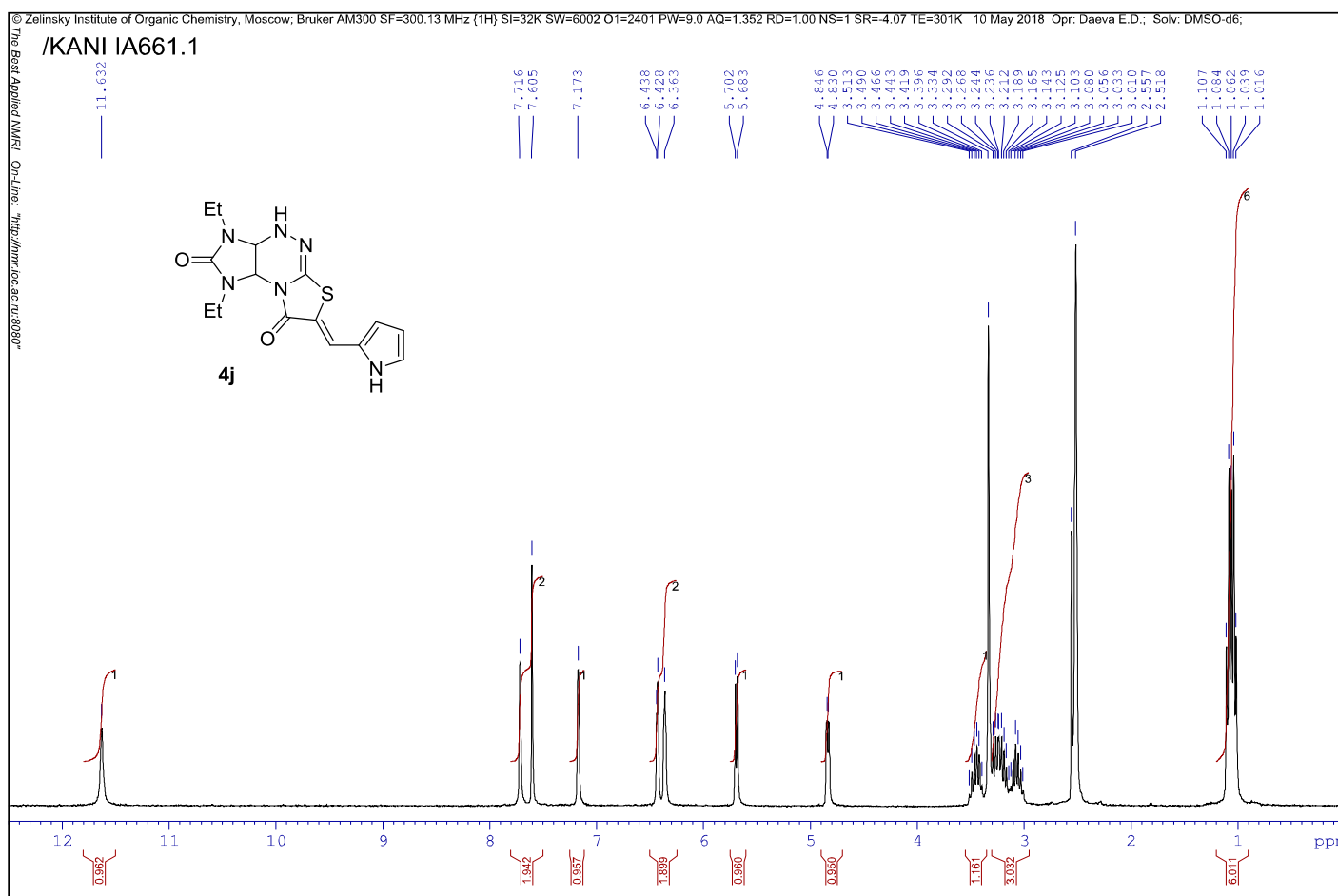
¹H NMR spectrum of **4i**



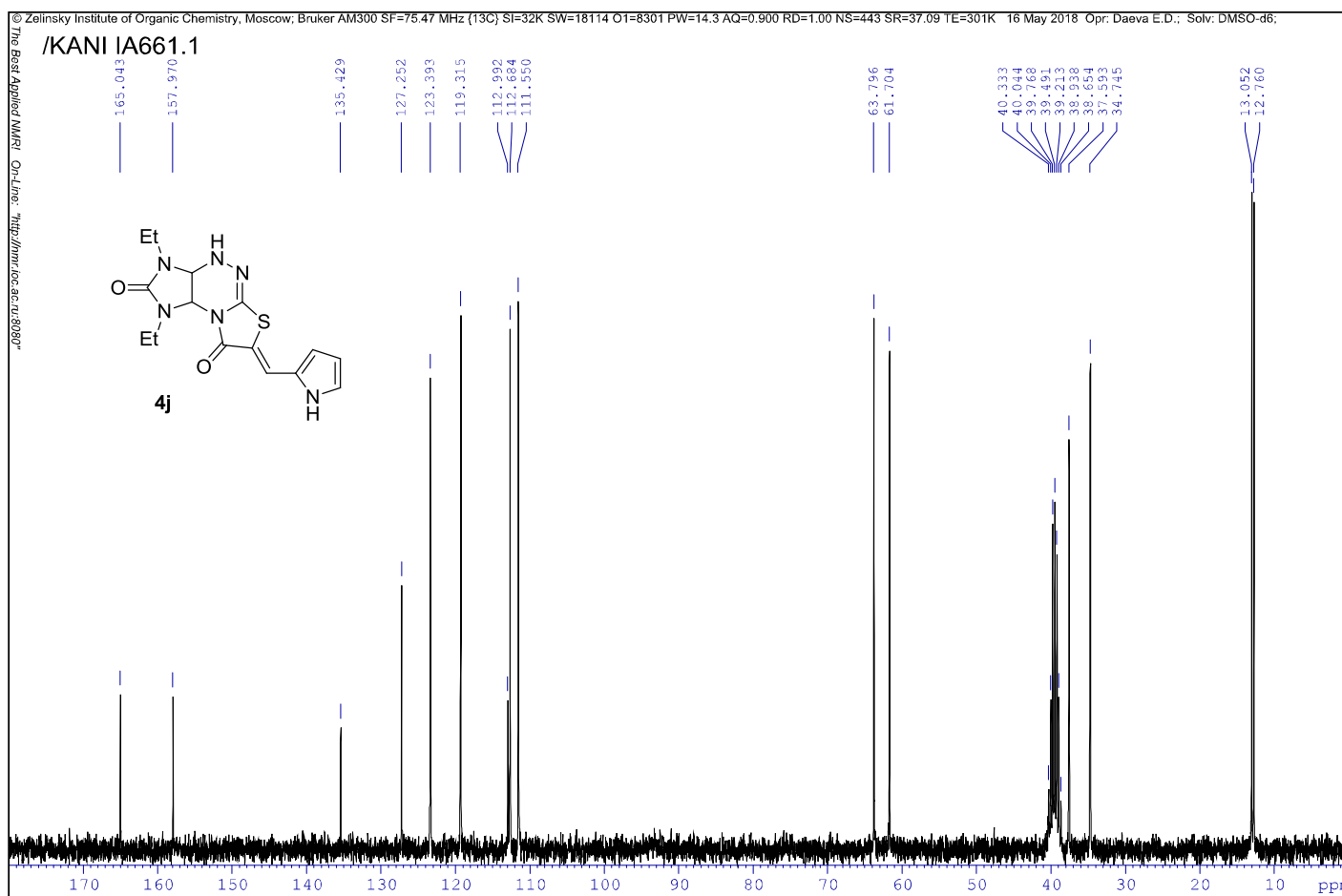
¹³C NMR spectrum of **4i**



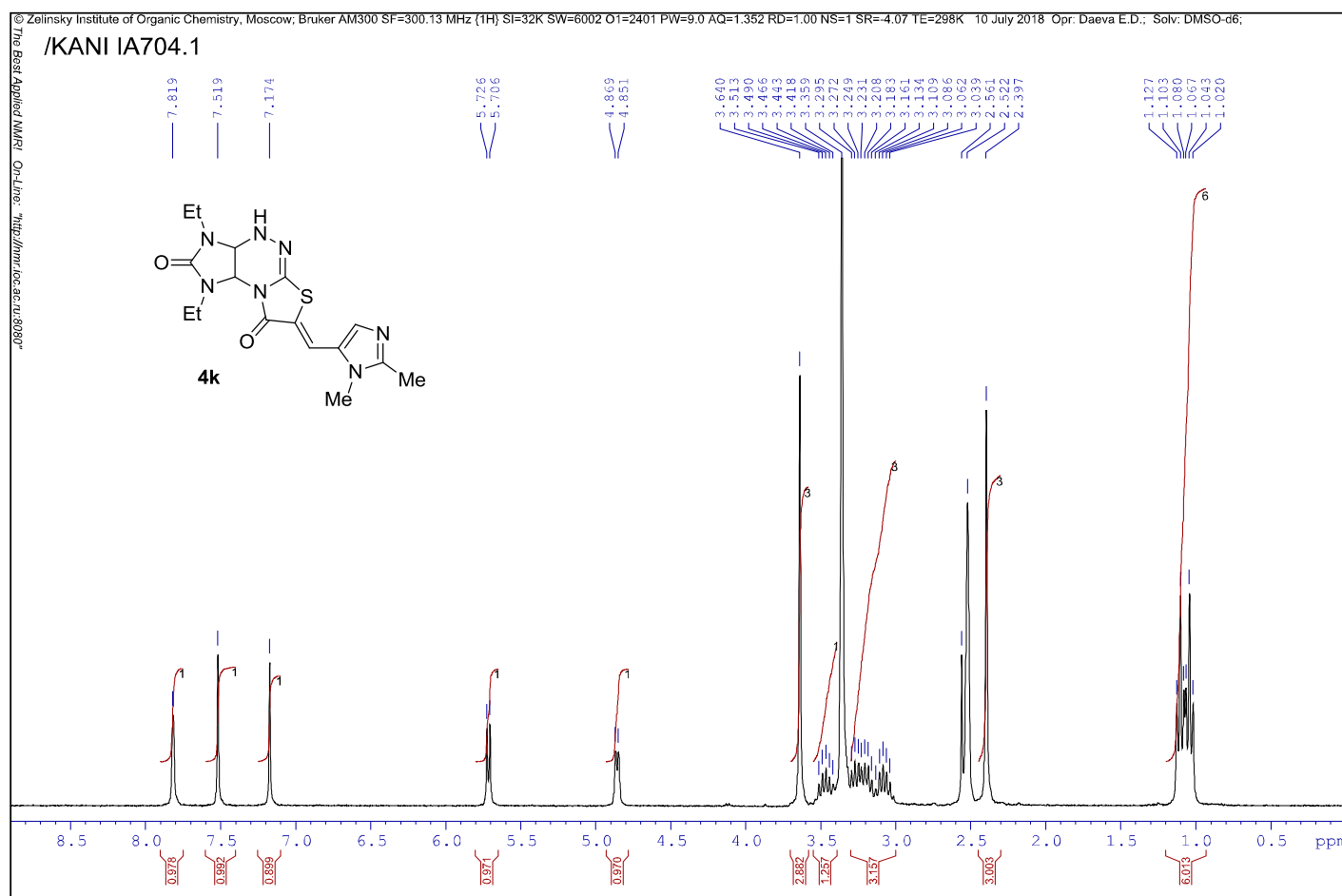
¹H NMR spectrum of **4j**



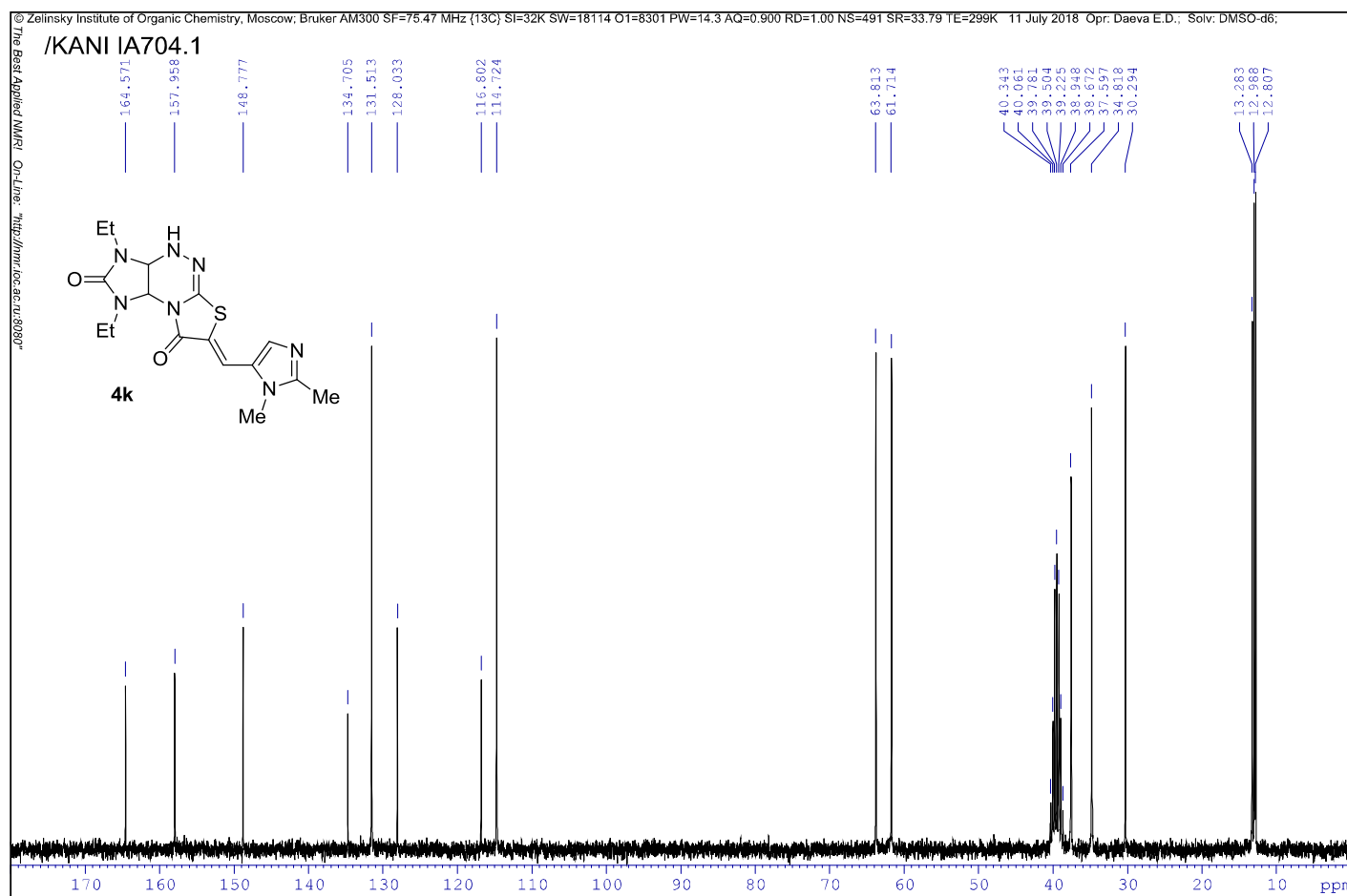
¹³C NMR spectrum of **4j**



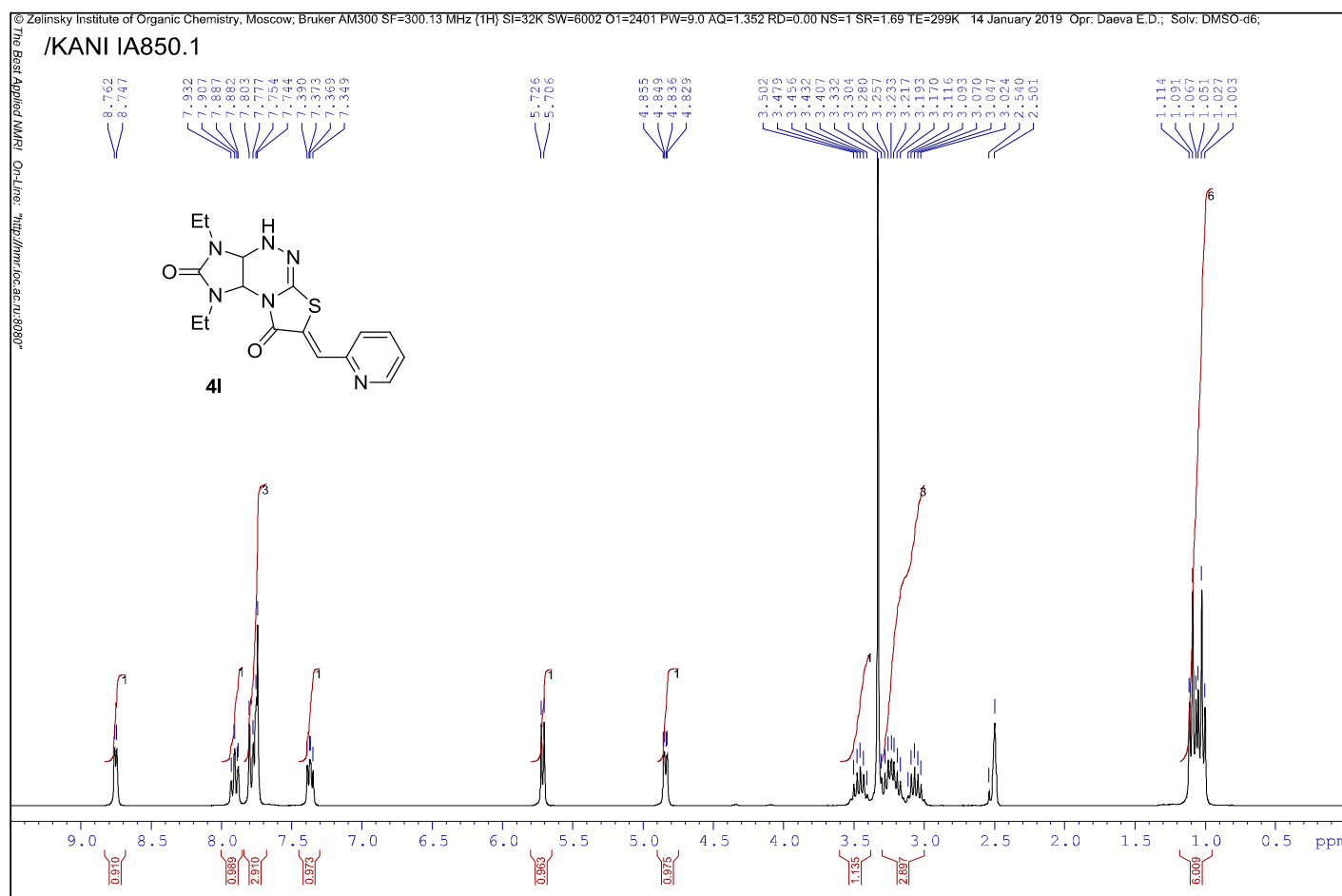
¹H NMR spectrum of **4k**



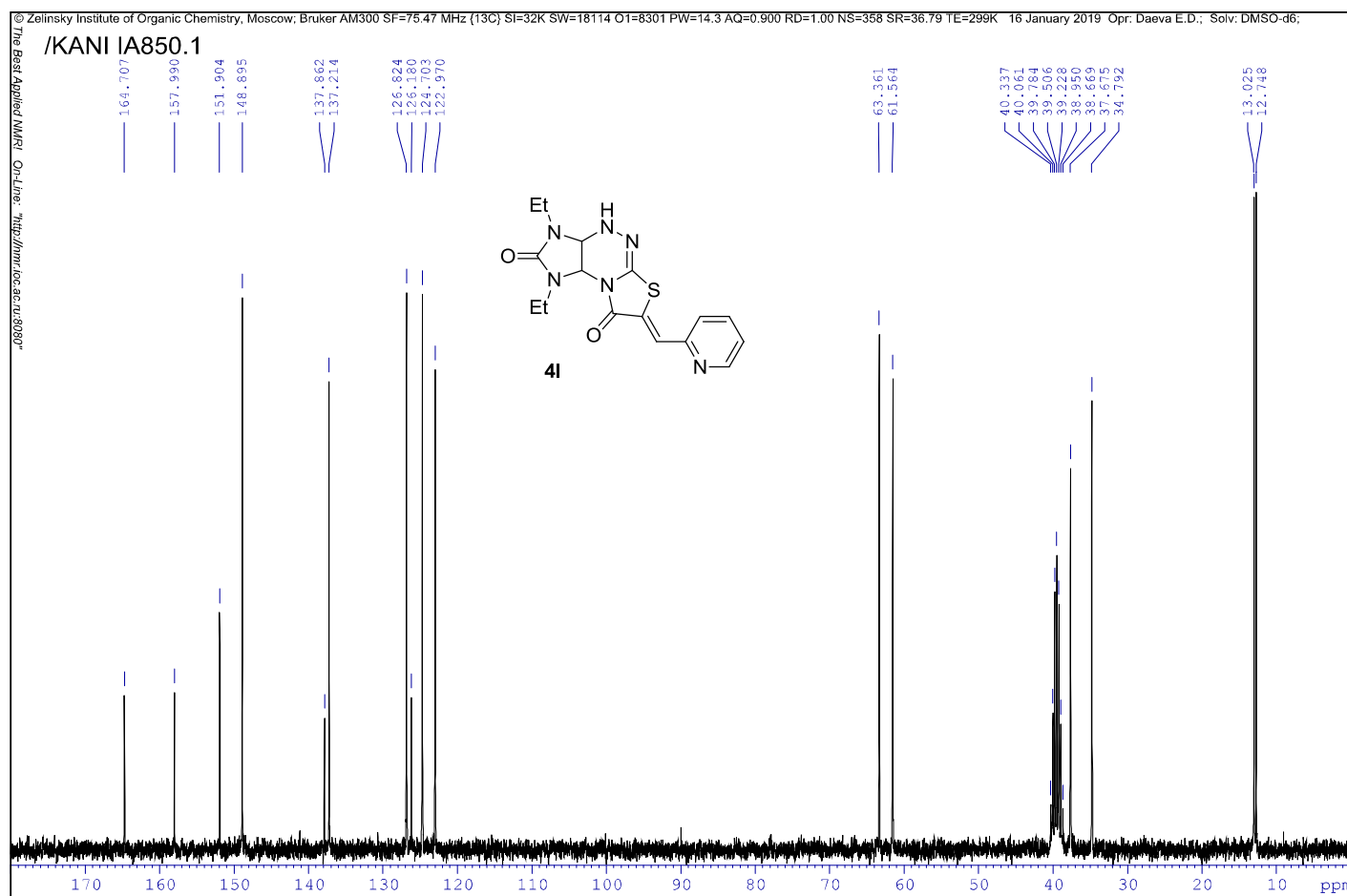
¹³C NMR spectrum of **4k**



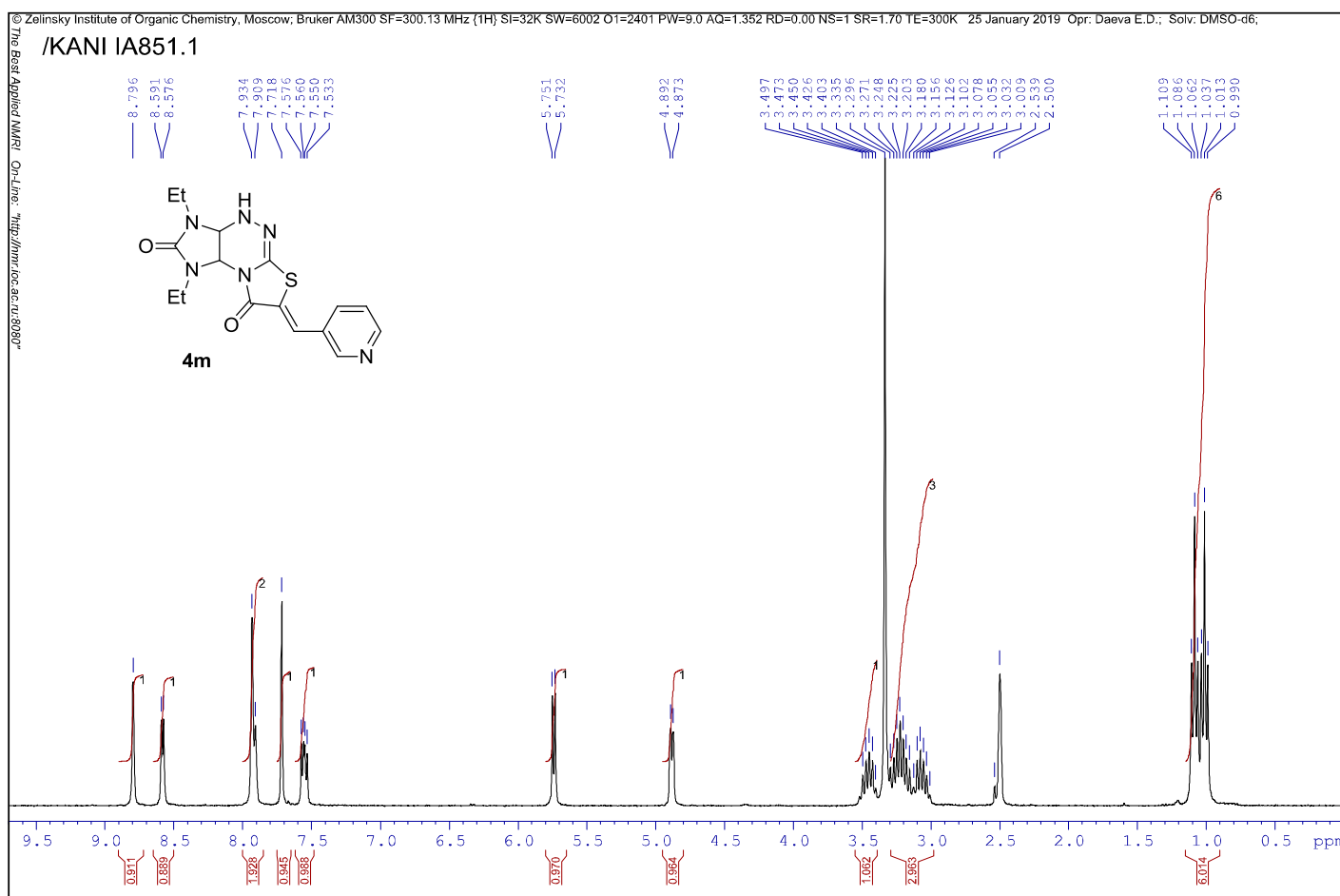
¹H NMR spectrum of **4l**



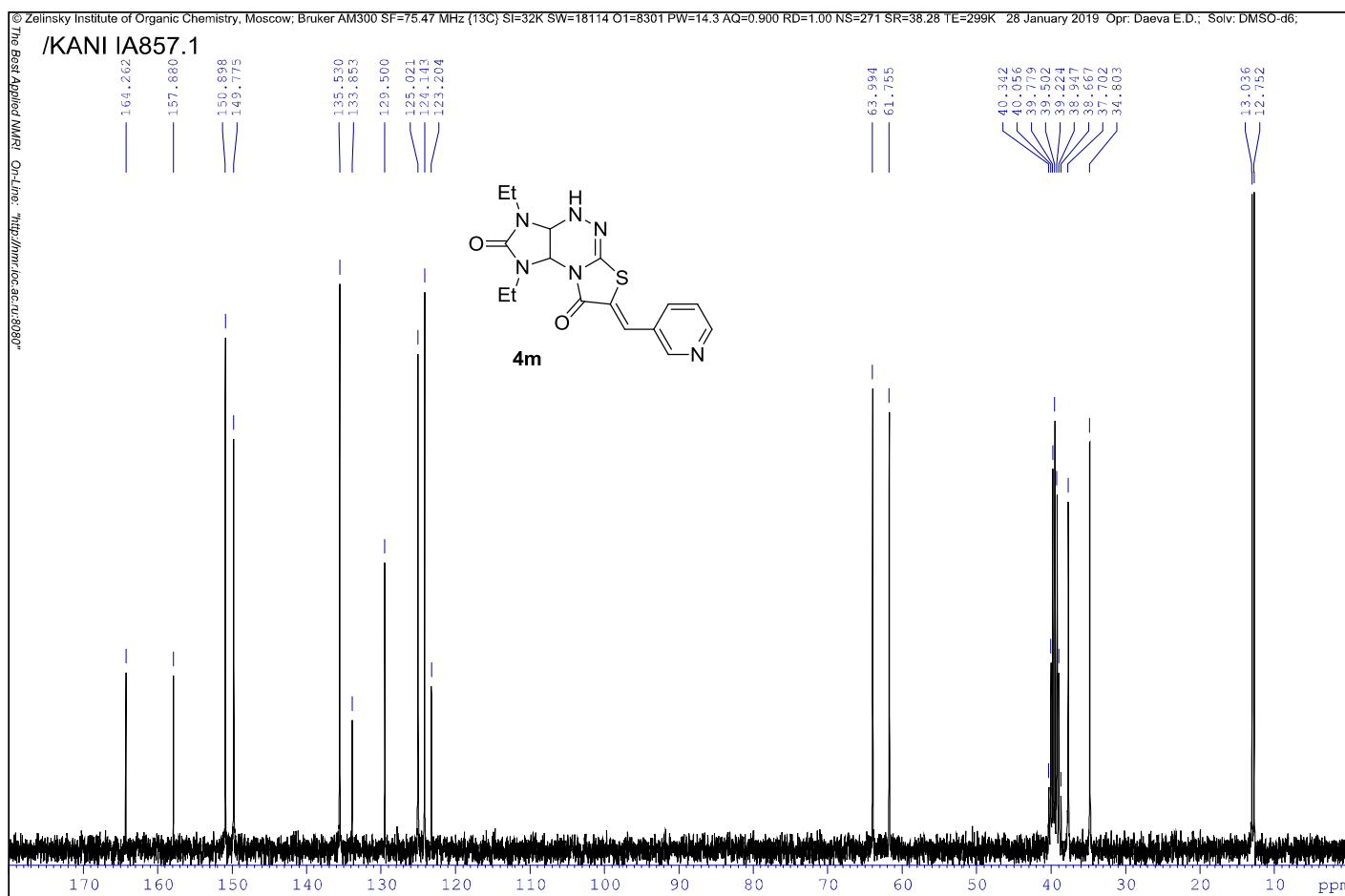
¹³C NMR spectrum of **4l**



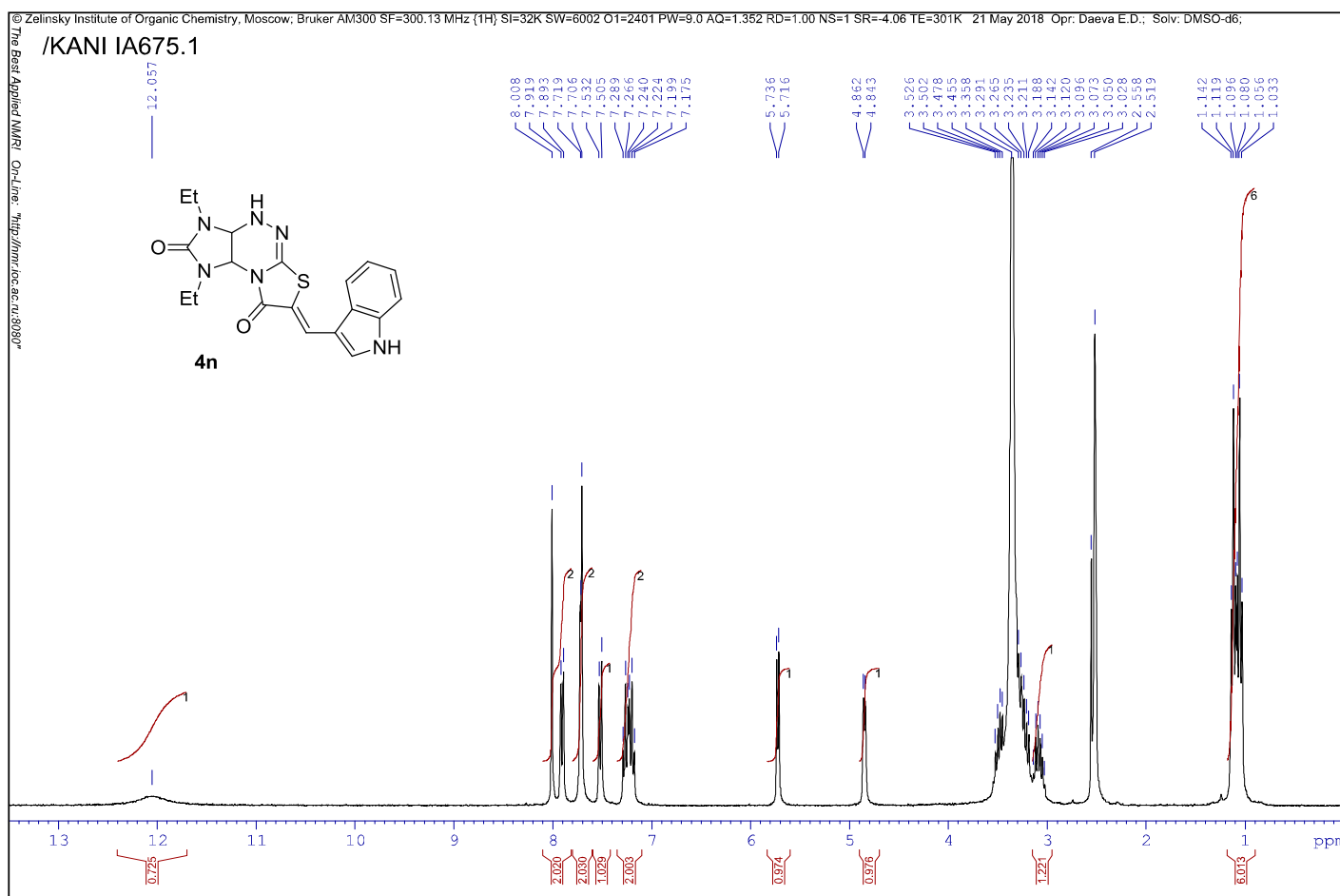
¹H NMR spectrum of **4m**



¹³C NMR spectrum of **4m**



¹H NMR spectrum of **4n**



¹³C NMR spectrum of **4n**

