Appendix A: Supplementary Information

Predictability of the time-dependent toxicities of aminoglycoside antibiotic mixtures to *Vibrio qinghaiensis* sp.-Q67

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Contents

(Seven Tables and 13 Figures)

Table S1 The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of the four antibiotics at five time points.

Antibiotics	Time	*Func*	α	β	RMSE	R	EC_{20}	pEC_{20}	EC_{50}	pEC_{50}
APR	0.25h	Logit	12.58	3.07	0.023	0.7371	∞	0	∞	0
	2h	Logit	21.88	4.83	0.015	0.9184	∞	0	∞	0
	4h	Logit	16.20	3.19	0.019	0.9947	3.07 E-6	5.51	8.35 E-6	5.08
	8h	Logit	21.55	3.95	0.029	0.9901	1.56 E-6	5.81	3.50 E-6	5.46
	12h	Logit	25.32	4.57	0.030	0.9959	1.43 E-6	5.84	2.88 E-6	5.50
DIH	0.25h	Logit	11.96	2.93	0.038	0.8194	∞	0	∞	0
	2h	Logit	11.70	2.60	0.025	0.9809	1.01 E-5	4.99	∞	0
	4h	Logit	12.36	2.5	0.025	0.9941	3.17 E-6	5.50	1.14 E-5	4.49
	8h	Logit	15.98	2.89	0.24	0.9972	9.79 E-7	6.01	2.96 E-6	5.53
	12h	Logit	19.49	3.37	0.018	0.9986	6.39 E-7	6.19	1.65 E-6	5.78
KAN	0.25h	Logit	24.97	5.73	0.025	0.3824	∞	0	∞	0
	2h	Logit	23.75	5.00	0.015	0.9775	9.39 E-6	5.03	∞	0
	4h	Logit	11.79	2.26	0.028	0.9908	1.02 E-5	4.99	2.69 E-5	4.57
	8h	Logit	15.18	2.63	0.035	0.9920	5.02 E-7	6.30	1.69 E-6	5.77
	12h	Logit	20.27	3.4	0.028	0.9965	4.27 E-7	6.37	1.09 E-6	5.96
NEO	0.25h	Logit	7.83	2.09	0.016	0.6992	∞	0	∞	0
	2h	Logit	14.96	2.99	0.015	0.9896	3.41 E-6	5.47	∞	0
	4h	Logit	16.1	2.85	0.036	0.9890	7.32 E-7	6.14	2.24 E-6	5.65
	8h	Logit	21.77	3.62	0.041	0.9923	4.01 E-7	6.40	9.69 E-7	6.01
	12h	Logit	25.38	4.15	0.036	0.9951	3.55 E-7	6.45	7.66 E-7	6.12

Table S2a The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of five rays in APR-DIH mixture system (BM1) at five time points.

Ray	Time (h)	Func	α	β	RMSE	R	EC_{20}	pEC_{20}	EC_{50}	pEC_{50}
R1	0.25	Logit	14.99	3.37	0.056	0.5049	∞	0	∞	0
	2	Logit	11.61	2.49	0.044	0.8687	6.03 E-6	5.22	∞	0
	4	Logit	10.59	2.08	0.050	0.9482	1.75 E-6	5.76	∞	0
	8	Logit	14.81	2.63	0.035	0.9911	6.95 E-7	6.16	2.34 E-6	5.63
	12	Logit	19.87	3.30	0.028	0.9965	2.65 E-7	6.58	9.55 E-7	6.02
R2	0.25	Logit	21.37	4.39	0.063	0.5546	∞	0	∞	0
	2	Logit	13.51	2.73	0.045	0.8964	3.50 E-6	5.46	∞	0
	4	Logit	13.62	2.53	0.047	0.9678	1.17 E-6	5.93	4.14 E-6	5.38
	8	Logit	15.82	2.70	0.022	0.9969	4.24 E-7	6.37	1.38 E-6	5.86
	12	Logit	19.24	3.07	0.020	0.9980	1.91 E-7	6.72	5.41 E-7	6.27
R3	0.25	Logit	14.98	3.07	0.086	0.5927	∞	0	∞	0
	2	Logit	16.49	3.14	0.056	0.9069	2.03 E-6	5.69	∞	0
	4	Logit	15.91	2.82	0.036	0.9856	7.35 E-7	6.13	2.28 E-6	5.64
	8	Logit	17.37	2.86	0.012	0.9992	2.77 E-7	6.56	8.44 E-7	6.07
	12	Logit	22.43	3.48	0.015	0.9990	1.43 E-7	6.84	3.59 E-7	6.44
R4	0.25	Logit	20.66	4.11	0.064	0.4006	∞	0	∞	0
	2	Logit	15.65	2.92	0.053	0.8990	1.46 E-6	5.83	∞	0
	4	Logit	11.21	1.96	0.042	0.9727	3.74 E-7	6.43	1.91 E-6	5.72
	8	Logit	15.80	2.50	0.022	0.9970	1.34 E-7	6.87	4.79 E-7	6.32
	12	Logit	20.25	3.03	0.027	0.9961	7.23 E-8	7.14	2.07 E-7	6.68
R5	0.25	Logit	12.76	2.60	0.062	0.5807	∞	0	∞	0
	2	Logit	15.65	2.84	0.053	0.9229	1.00 E-6	6.00	∞	0
	4	Logit	15.09	2.53	0.034	0.9885	3.07 E-7	6.51	1.09 E-6	5.96
	8	Logit	18.17	2.81	0.027	0.9961	1.10 E-7	6.96	3.42 E-7	6.47
	12	Logit	23.89	3.51	0.021	0.9980	6.29 E-8	7.20	1.56 E-7	6.81

Table S2b The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of five rays in APR-KAN mixture system (BM2) at five time points.

Ray	Time (h)	Func	α	β	RMSE	R	EC_{20}	pEC_{20}	EC_{50}	pEC_{50}
	0.25	Logit	5.21	1.68	0.013	0.7473	∞	0	∞	0
	2	Logit	10.95	2.44	0.30	0.9378	8.79 E-6	5.06	∞	0
R1	4	Logit	14.22	2.86	0.064	0.9335	3.49 E-6	5.46	1.07E-5	4.97
	8	Logit	18.09	3.40	0.038	0.9898	1.87 E-6	5.73	4.78 E-6	5.32
	12	Logit	18.15	3.26	0.042	0.9920	1.02 E-6	5.99	2.71 E-6	5.57
	0.25	Logit	4.01	1.49	0.019	0.6321	∞	0	∞	0
	2	Logit	8.35	1.91	0.025	0.9579	7.99 E-6	5.10	∞	0
R2	4	Logit	11.57	2.32	0.041	0.9731	2.60 E-6	5.58	1.03 E-5	4.99
	8	Logit	17.09	3.18	0.032	0.9927	1.55 E-6	5.81	4.22 E-6	5.37
	12	Logit	18.50	3.29	0.057	0.9846	9.03 E-7	6.04	2.38 E-6	5.62
	0.25	Logit	7.29	2.03	0.027	0.7056	∞	0	∞	0
	2	Logit	10.68	2.30	0.033	0.9574	5.67 E-6	5.25	∞	0
R3	4	Logit	13.34	2.60	0.056	0.9642	2.17 E-6	5.66	7.40 E-6	5.13
	8	Logit	17.94	3.28	0.032	0.9938	1.28 E-6	5.89	3.39 E-6	5.47
	12	Logit	20.64	3.63	0.035	0.9947	8.55 E-7	6.07	2.06 E-6	5.69
	0.25	Logit	5.20	1.69	0.026	0.5343	∞	0	∞	0
	2	Logit	10.43	2.21	0.036	0.9578	4.50 E-6	5.35	∞	0
R4	4	Logit	12.13	2.32	0.044	0.9778	1.49 E-6	5.83	5.91 E-6	5.23
	8	Logit	15.93	2.84	0.025	0.9963	7.99 E-7	6.10	2.46 E-6	5.61
	12	Logit	18.43	3.14	0.041	0.9926	4.89 E-7	6.31	1.35 E-6	5.87
	0.25	Logit	15.78	3.70	0.032	0.6026	∞	0	∞	0
	2	Logit	11.75	2.41	0.043	0.9580	3.54 E-6	5.45	∞	0
R5	4	Logit	12.92	2.42	0.057	0.9711	1.23 E-6	5.91	4.58 E-6	5.34
	8	Logit	17.75	3.10	0.043	0.9906	6.71 E-7	6.17	1.88 E-6	5.73
	12	Logit	21.81	3.67	0.068	0.9812	4.78 E-7	6.32	1.14 E-6	5.94

Table S2c The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of five rays in APR-NEO mixture system (BM3) at five time points.

Ray	Time (h)	Func	α	β	RMSE	R	EC_{20}	pEC_{20}	EC_{50}	pEC_{50}
	0.25	Logit	14.99	3.37	0.048	0.3769	∞	0	∞	0
	2	Logit	16.26	3.12	0.056	0.9291	2.21 E-6	5.66	∞	0
R1	4	Logit	16.60	2.95	0.053	0.9775	8.00 E-7	6.10	2.36E-6	5.63
	8	Logit	20.03	3.38	0.040	0.9928	4.61 E-7	6.34	1.19E-6	5.93
	12	Logit	19.11	3.13	0.045	0.9910	2.83 E-7	6.55	7.84 E-7	6.10
	0.25	Logit	14.98	3.35	0.038	0.5833	∞	0	∞	0
	2	Logit	12.98	2.62	0.038	0.9472	3.29 E-6	5.48	∞	0
R2	4	Logit	13.16	2.44	0.037	0.9841	1.09 E-6	5.96	4.04 E-6	5.39
	8	Logit	18.88	3.29	0.038	0.9923	6.92 E-7	6.16	1.83 E-6	5.74
	12	Logit	18.21	3.07	0.037	0.9937	4.14 E-7	6.38	1.17 E-6	5.93
	0.25	Logit	13.02	2.97	0.033	0.7448	∞	0	∞	0
	2	Logit	12.03	2.50	0.031	0.9569	4.30 E-6	5.34	∞	0
R3	4	Logit	15.17	2.88	0.042	0.9795	1.78 E-6	5.75	5.40 E-6	5.27
	8	Logit	20.13	3.60	0.037	0.9925	1.06 E-6	5.98	2.56 E-6	5.59
	12	Logit	19.55	3.38	0.048	0.9894	6.40 E-7	6.19	1.64 E-6	5.78
	0.25	Logit	19.99	4.45	0.083	0.3420	∞	0	∞	0
	2	Logit	19.11	3.99	0.078	0.7101	7.30 E-6	5.14	∞	0
R4	4	Logit	15.40	3.03	0.068	0.9216	2.88 E-6	5.54	8.27 E-6	5.083
	8	Logit	17.99	3.29	0.042	0.9895	2.88 E-6	5.54	8.27 E-6	5.468
	12	Logit	16.88	2.96	0.049	0.9874	6.74 E-7	6.17	1.98 E-6	5.703
	0.25	Logit	14.98	3.60	0.048	0.2603	∞	0	∞	0
	2	Logit	12.94	2.89	0.058	0.6811	1.10 E-5	4.96	∞	0
R5	4	Logit	12.22	2.49	0.043	0.9533	3.43 E-6	5.46	1.24 E-5	4.91
	8	Logit	16.88	3.15	0.033	0.9919	1.59 E-6	5.80	4.38 E-6	5.359
	12	Logit	16.93	3.02	0.044	0.9897	8.61E-7	6.06	2.48E-6	5.606

Table S2d The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of five rays in DIH-KAN mixture system (BM4) at five time points.

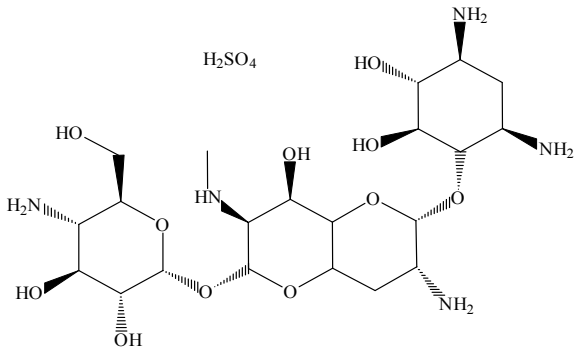
Ray	Time (h)	Func	α	β	RSS	R	EC_{20}	pEC_{20}	EC_{50}	pEC50
	0.25	Logit	7.96	1.85	0.045	0.6882	∞	0	∞	0
	2	Logit	13.01	2.49	0.029	0.9790	1.65 E-6	5.78	∞	0
R1	4	Logit	14.73	2.63	0.036	0.9866	7.45 E-7	6.13	2.51 E-6	5.60
	8	Logit	16.57	2.69	0.031	0.9944	2.11 E-7	6.68	6.92 E-7	6.16
	12	Logit	22.01	3.39	0.043	0.9913	1.25 E-7	6.90	3.22 E-7	6.49
	0.25	Logit	5.91	1.48	0.023	0.8056	∞	0	∞	0
	2	Logit	12.24	2.29	0.014	0.9942	1.12 E-6	5.95	∞	0
R2	4	Logit	12.45	2.16	0.023	0.9934	3.93 E-7	6.41	1.72 E-6	5.76
	8	Logit	16.02	2.52	0.023	0.9969	1.24E-7	6.91	4.39 E-7	6.36
	12	Logit	19.82	2.95	0.025	0.9963	6.48 E-8	7.19	1.91 E-7	6.72
	0.25	Logit	10.81	2.27	0.069	0.5862	∞	0	∞	0
	2	Logit	14.98	2.71	0.061	0.9267	9.14 E-7	6.04	∞	0
R3	4	Logit	13.87	2.37	0.046	0.9773	3.65 E-7	6.44	1.41 E-6	5.85
	8	Logit	17.05	2.65	0.030	0.9949	1.10 E-7	6.96	3.68 E-7	6.43
	12	Logit	22.08	3.25	0.029	0.9955	6.02 E-8	7.22	1.61 E-7	6.79
	0.25	Logit	21.86	4.23	0.113	0.3362	∞	0	∞	0
	2	Logit	17.90	3.25	0.082	0.8210	1.16 E-6	5.93	∞	0
R4	4	Logit	14.99	2.58	0.081	0.9182	4.49 E-7	6.35	1.55 E-6	5.81
	8	Logit	15.47	2.37	0.044	0.9874	7.72E-8	7.11	2.97E-7	6.53
	12	Logit	22.28	3.21	0.033	0.9942	4.24E-8	7.37	1.15 E-7	6.94
	0.25	Logit	22.10	4.10	0.059	0.7049	∞	0	∞	0
	2	Logit	18.56	3.29	0.040	0.9581	8.66 E-7	6.06	∞	0
R5	4	Logit	16.31	2.76	0.033	0.9873	3.88 E-7	6.41	1.23E-6	5.91
	8	Logit	15.58	2.36	0.017	0.9981	6.47E-8	7.19	2.50 E-7	6.60
	12	Logit	21.91	3.13	0.024	0.9966	3.61E-8	7.44	1.00 E-7	7.00

Table S2e The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of five rays in DIH-NEO mixture system (BM5) at five time points.

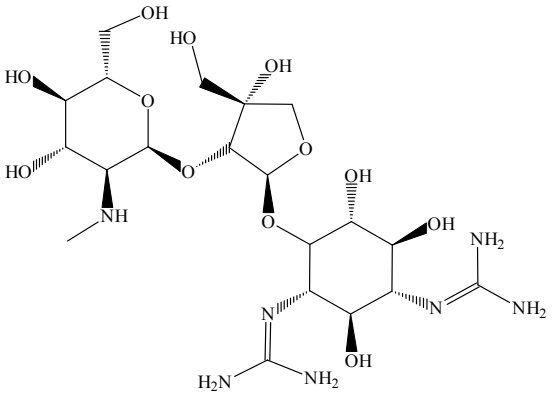
Ray	Time (h)	Func	α	β	RMSE	R	EC_{20}	pEC_{20}	EC_{50}	pEC_{50}
	0.25	Logit	8.96	2.15	0.058	0.4947	∞	0	∞	0
	2	Logit	13.37	2.45	0.038	0.9745	9.48 E-7	6.02	∞	0
R1	4	Logit	13.53	2.31	0.040	0.9849	3.49E-7	6.46	1.39 E-6	5.86
	8	Logit	18.86	3.01	0.029	0.9957	1.88 E-7	6.73	5.42 E-7	6.27
	12	Logit	24.65	3.77	0.035	0.9951	1.24 E-7	6.91	2.89 E-7	6.54
	0.25	Logit	9.51	2.12	0.056	0.6005	∞	0	∞	0
	2	Logit	13.28	2.40	0.045	0.9599	7.75 E-7	6.11	∞	0
R2	4	Logit	12.14	2.07	0.066	0.9501	2.92 E-7	6.53	1.37 E-6	5.86
	8	Logit	17.00	2.67	0.034	0.9931	1.30 E-7	6.89	4.29 E-7	6.37
	12	Logit	20.73	3.10	0.034	0.9944	7.34 E-8	7.13	2.06 E-7	6.69
	0.25	Logit	13.81	2.76	0.062	0.6603	∞	0	∞	0
	2	Logit	14.58	2.59	0.047	0.9556	6.85 E-7	6.16	∞	0
R3	4	Logit	11.67	1.98	0.064	0.9453	2.55 E-7	6.59	1.28E-6	5.89
	8	Logit	16.17	2.52	0.037	0.9916	1.08 E-7	6.97	3.83 E-7	6.42
	12	Logit	22.28	3.30	0.037	0.9937	6.74 E-8	7.17	1.77 E-7	6.75
	0.25	Logit	16.68	3.31	0.064	0.5252	∞	0	∞	0
	2	Logit	15.67	2.75	0.054	0.9458	6.28 E-7	6.20	∞	0
R4	4	Logit	15.04	2.48	0.048	0.9799	2.38E-7	6.62	8.62E-7	6.06
	8	Logit	17.01	2.61	0.023	0.9969	8.95E-8	7.05	3.04 E-7	6.52
	12	Logit	20.40	2.97	0.031	0.9950	4.62E-8	7.34	1.35 E-7	6.87
	0.25	Logit	11.14	2.30	0.066	0.4884	∞	0	∞	0
	2	Logit	14.87	2.60	0.043	0.9610	5.59 E-7	6.25	∞	0
R5	4	Logit	13.58	2.25	0.054	0.9673	2.23 E-7	6.65	9.21 E-7	6.04
	8	Logit	16.17	2.48	0.027	0.9953	2.23 E-7	6.65	9.21 E-7	6.52
	12	Logit	21.16	3.07	0.025	0.9967	4.53 E-8	7.34	1.28 E-7	6.89

Table S2f The fitted functions (Func) and their regression coefficients (location α and shape β), fitted correlation coefficient (R) and root mean square error (RMSE), effective concentrations (EC_{20} and EC_{50}) and their negative logarithm (pEC_{20} and pEC_{50}) of five rays in KAN-NEO mixture system (BM6) at five time points.

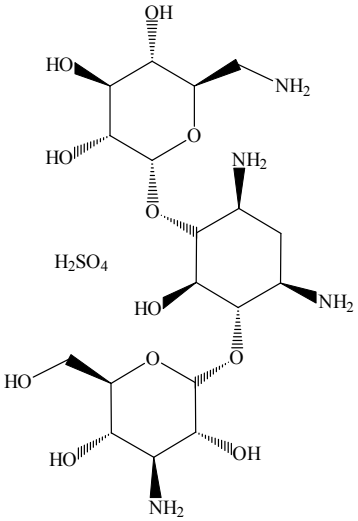
Ray	Time (h)	Func	α	β	RSS	R	EC_{20}	pEC_{20}	EC_{50}	pEC50
	0.25	Logit	1.82	0.96	0.031	0.3667	∞	0	∞	0
	2	Logit	12.67	2.44	0.038	0.9607	1.73 E-6	5.76	∞	0
R1	4	Logit	13.58	2.43	0.037	0.9846	6.93 E-7	6.16	2.58 E-6	5.59
	8	Logit	18.28	3.05	0.036	0.9930	3.56 E-7	6.45	1.02E-6	5.99
	12	Logit	19.77	3.19	0.040	0.9933	2.33 E-7	6.63	6.35E-7	6.20
	0.25	Logit	14.98	3.34	0.046	0.3856	∞	0	∞	0
	2	Logit	14.89	2.87	0.039	0.9613	2.13 E-6	5.67	∞	0
R2	4	Logit	15.68	2.83	0.032	0.9897	9.32 E-7	6.03	2.88 E-6	5.54
	8	Logit	19.15	3.31	0.034	0.9947	4.86 E-7	6.31	1.28 E-6	5.89
	12	Logit	19.03	3.11	0.044	0.9913	2.72 E-7	6.56	7.60 E-7	6.12
	0.25	Logit	10.45	2.44	0.041	0.7060	∞	0	∞	0
	2	Logit	15.19	2.96	0.037	0.9731	2.51 E-6	5.60	∞	0
R3	4	Logit	16.59	3.03	0.041	0.9864	1.17 E-6	5.93	3.35E-6	5.48
	8	Logit	20.08	3.46	0.040	0.9921	6.25 E-7	6.20	1.57 E-6	5.80
	12	Logit	19.60	3.24	0.039	0.9935	3.33 E-7	6.48	8.93 E-7	6.05
	0.25	Logit	17.87	3.95	0.055	0.4316	∞	0	∞	0
	2	Logit	13.84	2.81	0.048	0.9242	3.81 E-6	5.42	∞	0
R4	4	Logit	13.38	2.48	0.051	0.9727	1.11 E-6	5.95	4.03 E-6	5.40
	8	Logit	18.78	3.23	0.047	0.9892	5.71 E-7	6.24	1.53 E-6	5.81
	12	Logit	22.43	3.69	0.058	0.9870	3.18 E-7	6.50	8.39 E-7	6.08
	0.25	Logit	64.99	13.64	0.044	0.0380	∞	0	∞	0
	2	Logit	10.25	2.21	0.039	0.9115	5.43E-6	5.27	∞	0
R5	4	Logit	11.60	2.22	0.055	0.9582	1.41 E-6	5.85	5.95 E-6	5.23
	8	Logit	17.38	3.04	0.061	0.9801	6.71 E-7	6.17	1.92 E-6	5.72
	12	Logit	22.83	3.82	0.059	0.9862	4.58E-7	6.34	1.06 E-6	5.98



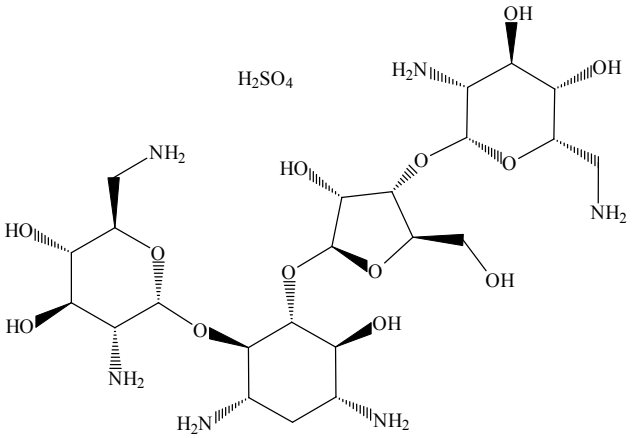
Apramycin sulfate (APR)



Dihydrostreptomycin (DIH)



Kaomycin sulfate (KAN)



Neomycin sulfate (NEO)

Fig. S1 Chemical structures of four antibiotics.

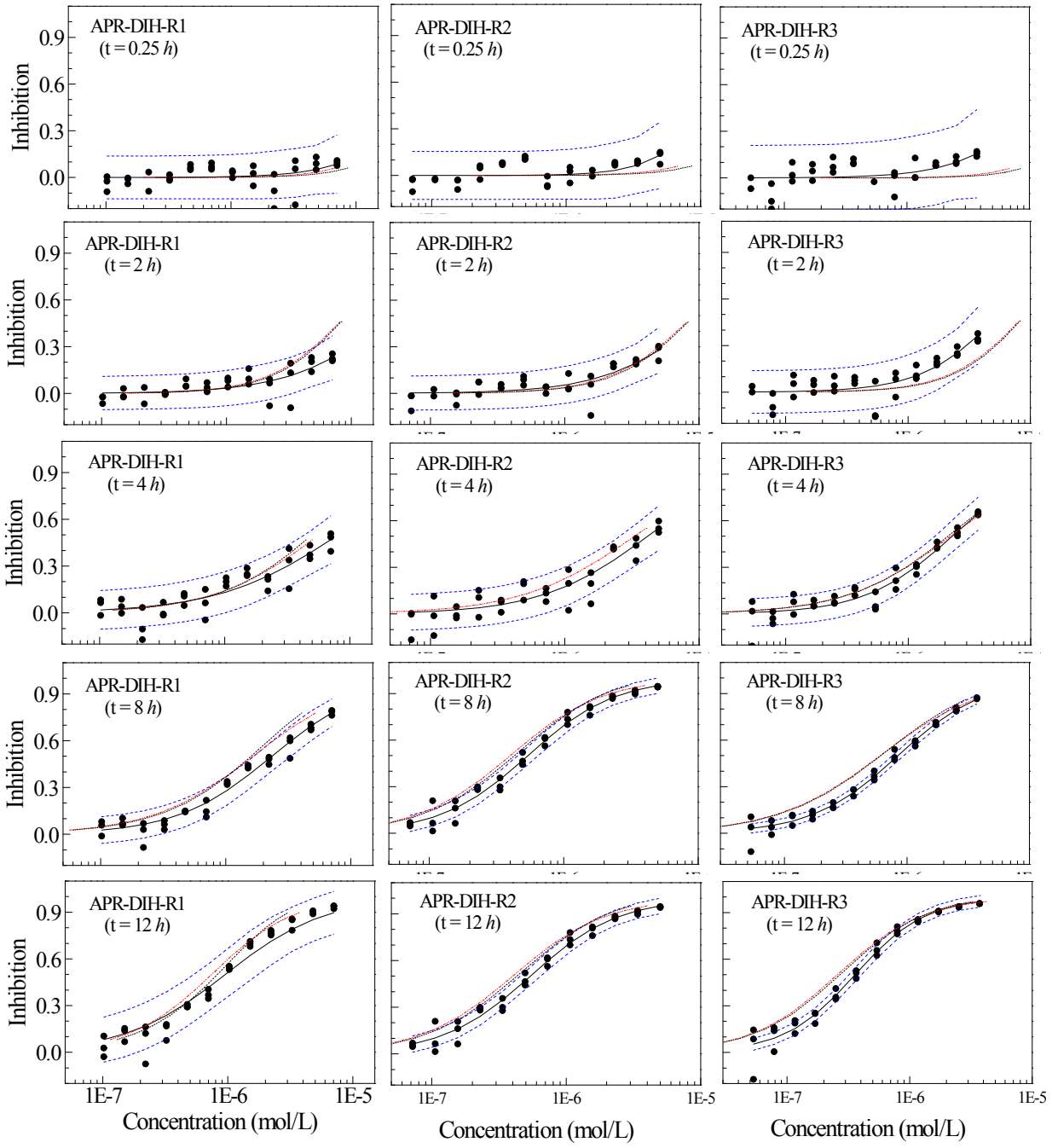


Fig. S2-1a The experimental concentration-response scatters (ஜ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R1, R2 and R3) in APR-DIH mixture system at five time points.

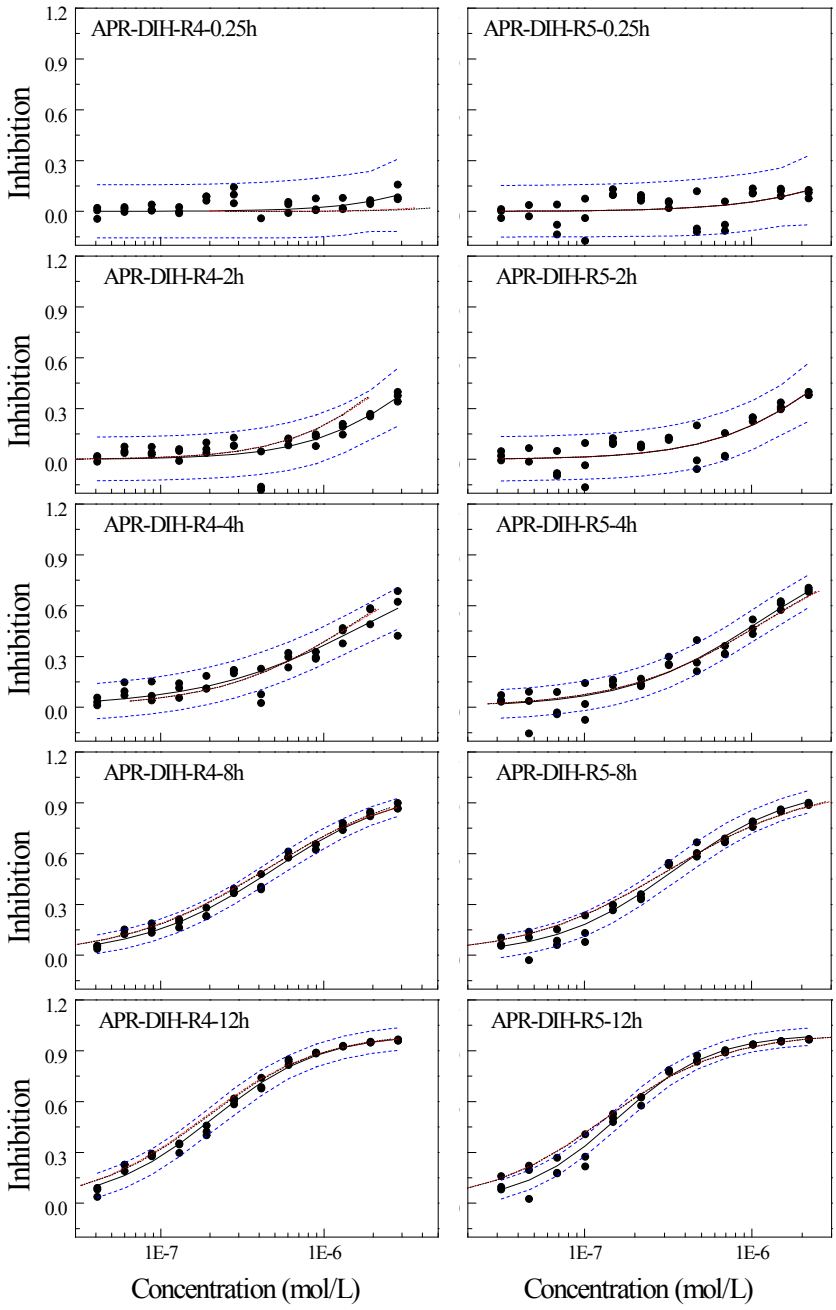


Fig. S2-1b The experimental concentration-response scatters (ஒ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of two rays (R4 and R5) in APR-DIH mixture system at five time points.

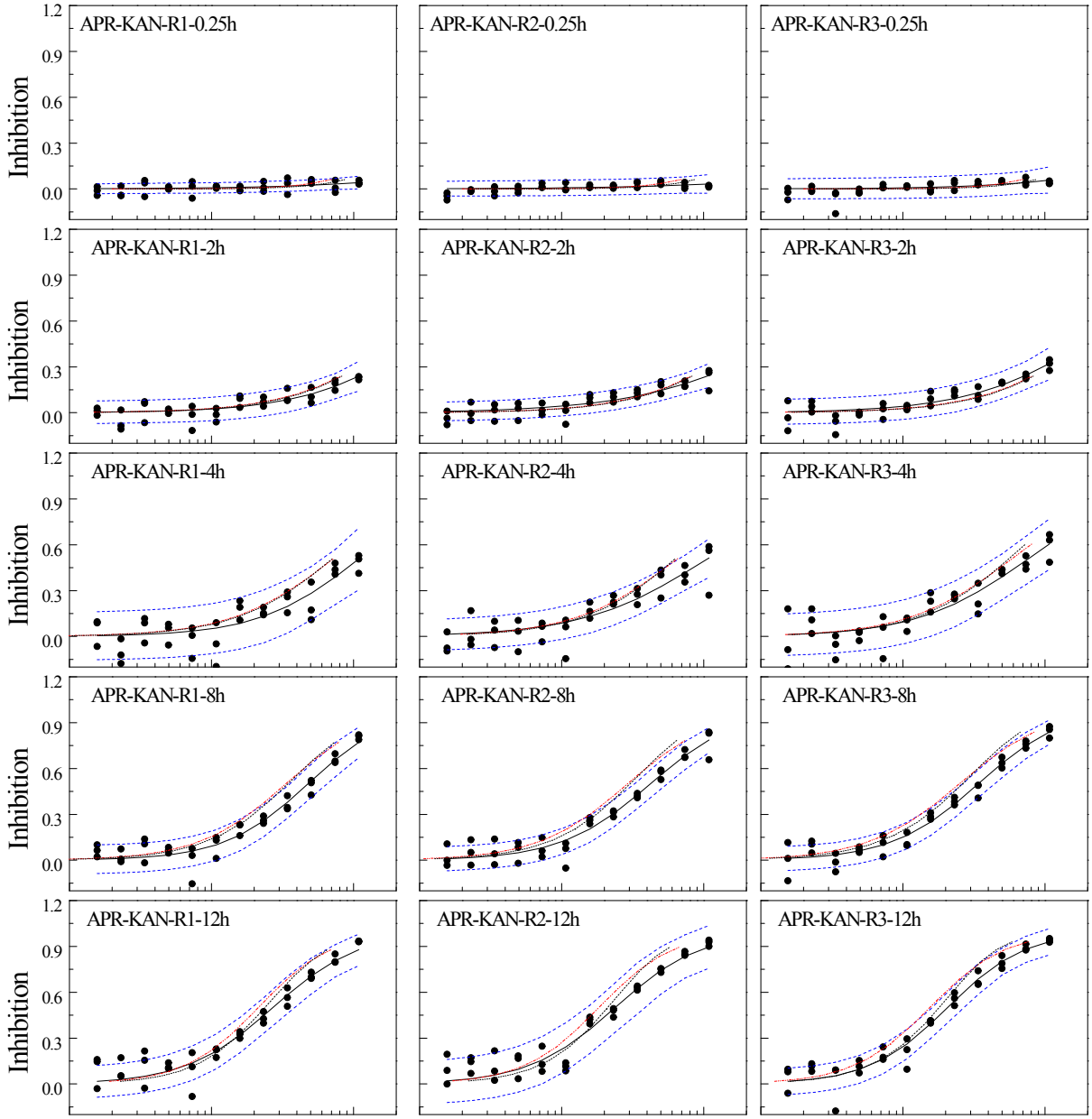


Fig. S2-2a The experimental concentration-response scatters (ஒ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R1, R2 and R3) in APR-KAN mixture system at five time points.

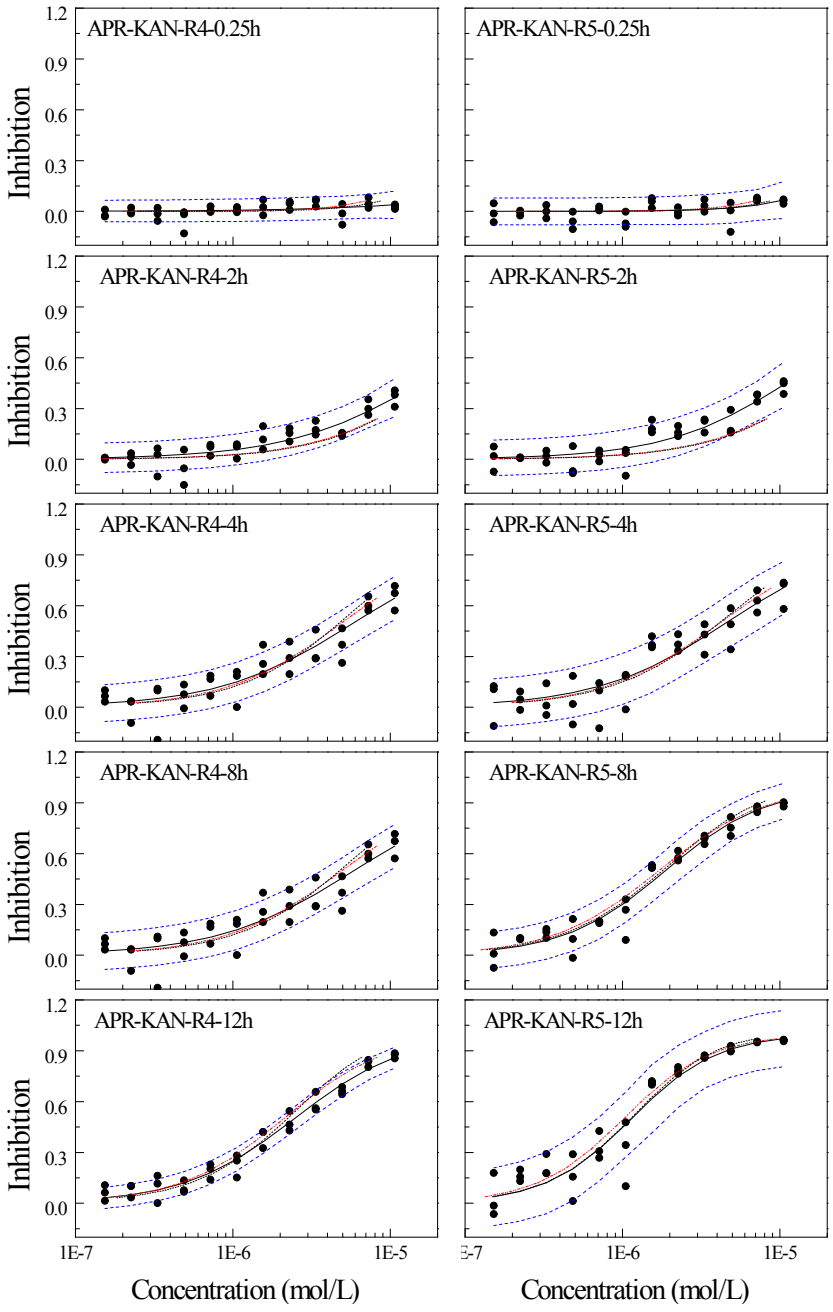


Fig. S2-2b The experimental concentration-response scatters (ஜ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of two rays (R4 and R5) in APR-KAN mixture systemat five time points.

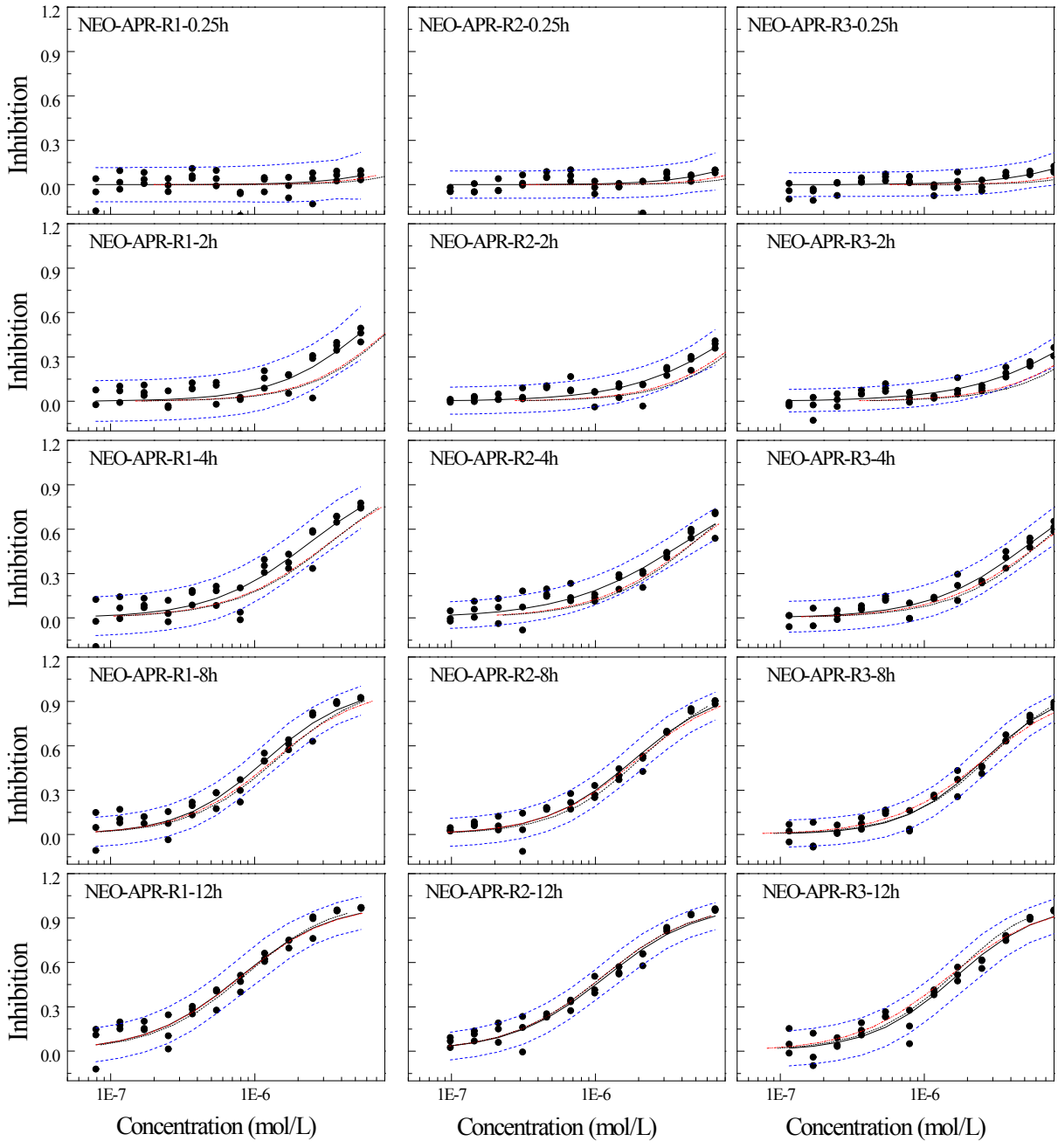


Fig. S2-3a The experimental concentration-response scatters (ஒ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R1, R2 and R3) in APR-NEO mixture system at five time points.

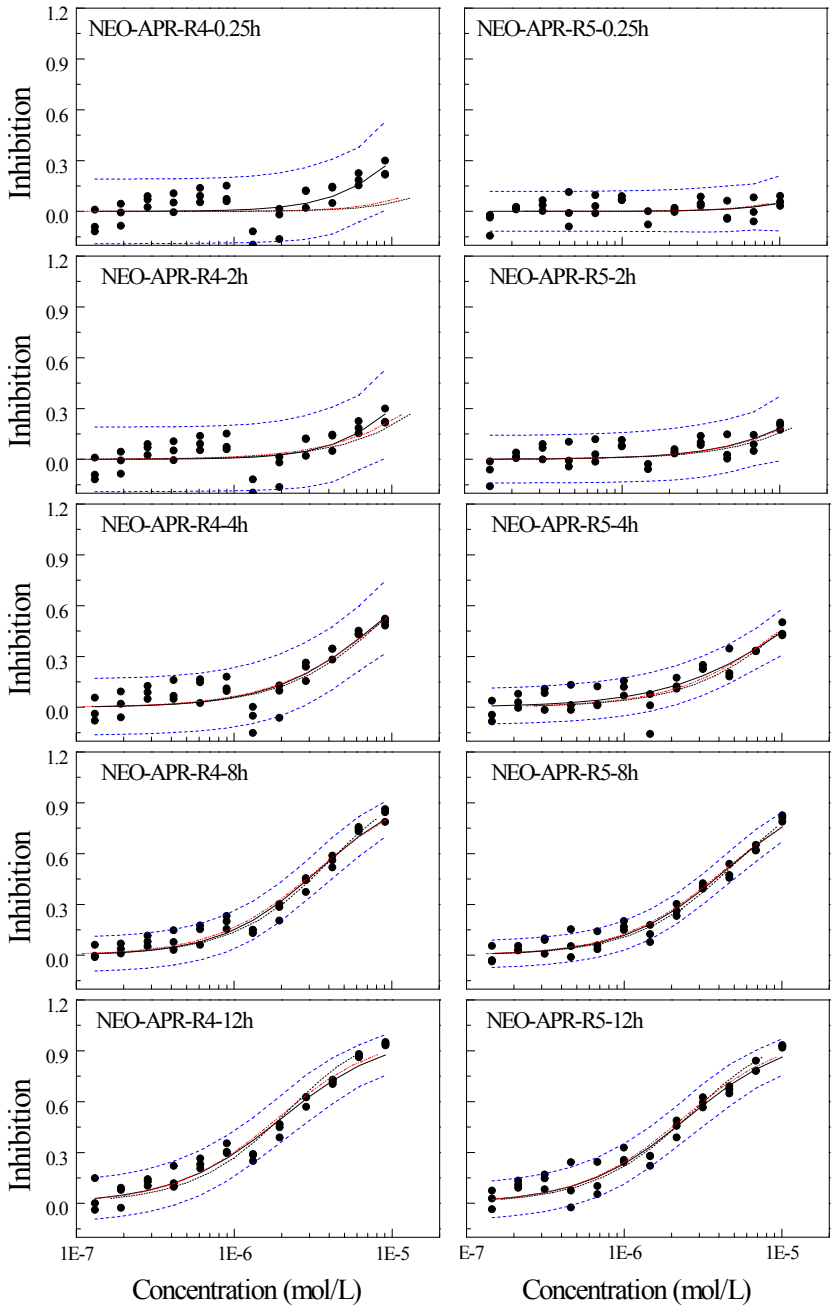


Fig. S2-3b The experimental concentration-response scatters (ꝏ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of two rays (R4 and R5) in APR-NEO mixture system at five time points.

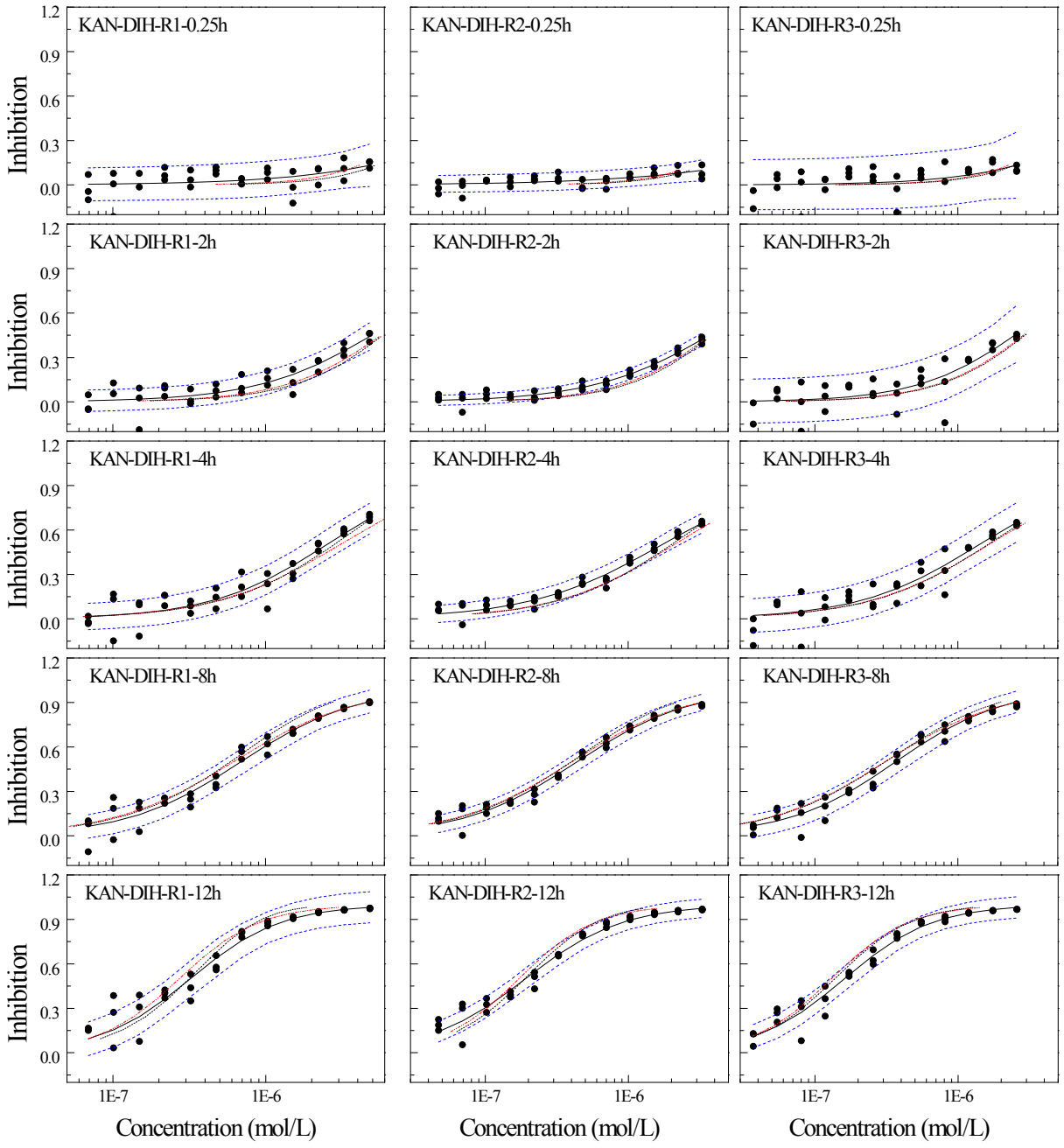


Fig. S2-4a The experimental concentration-response scatters (ஒ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R1, R2 and R3) in DIH-KAN mixture system at five time points.

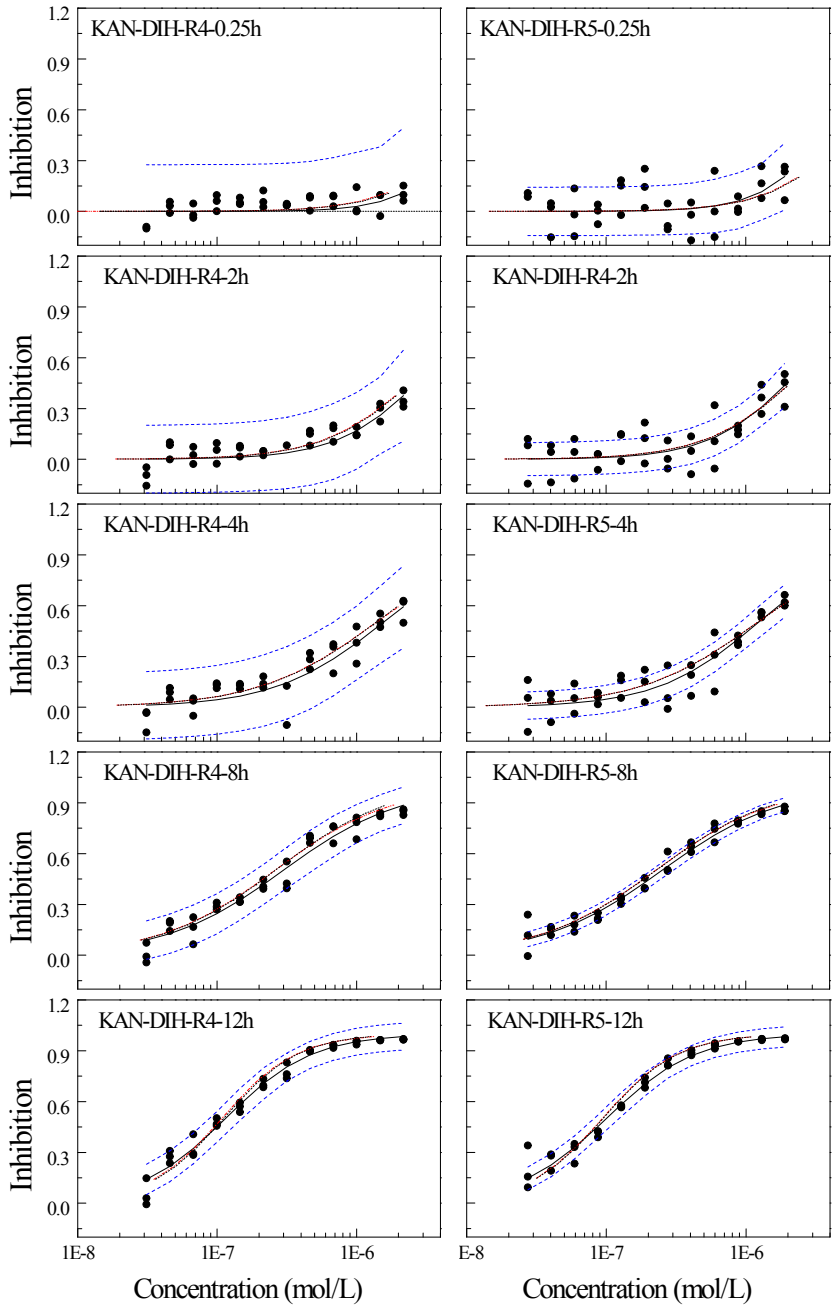


Fig. S2-4b The experimental concentration-response scatters (ஜ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R4 and R5) in DIH-KAN mixture system at five time points.

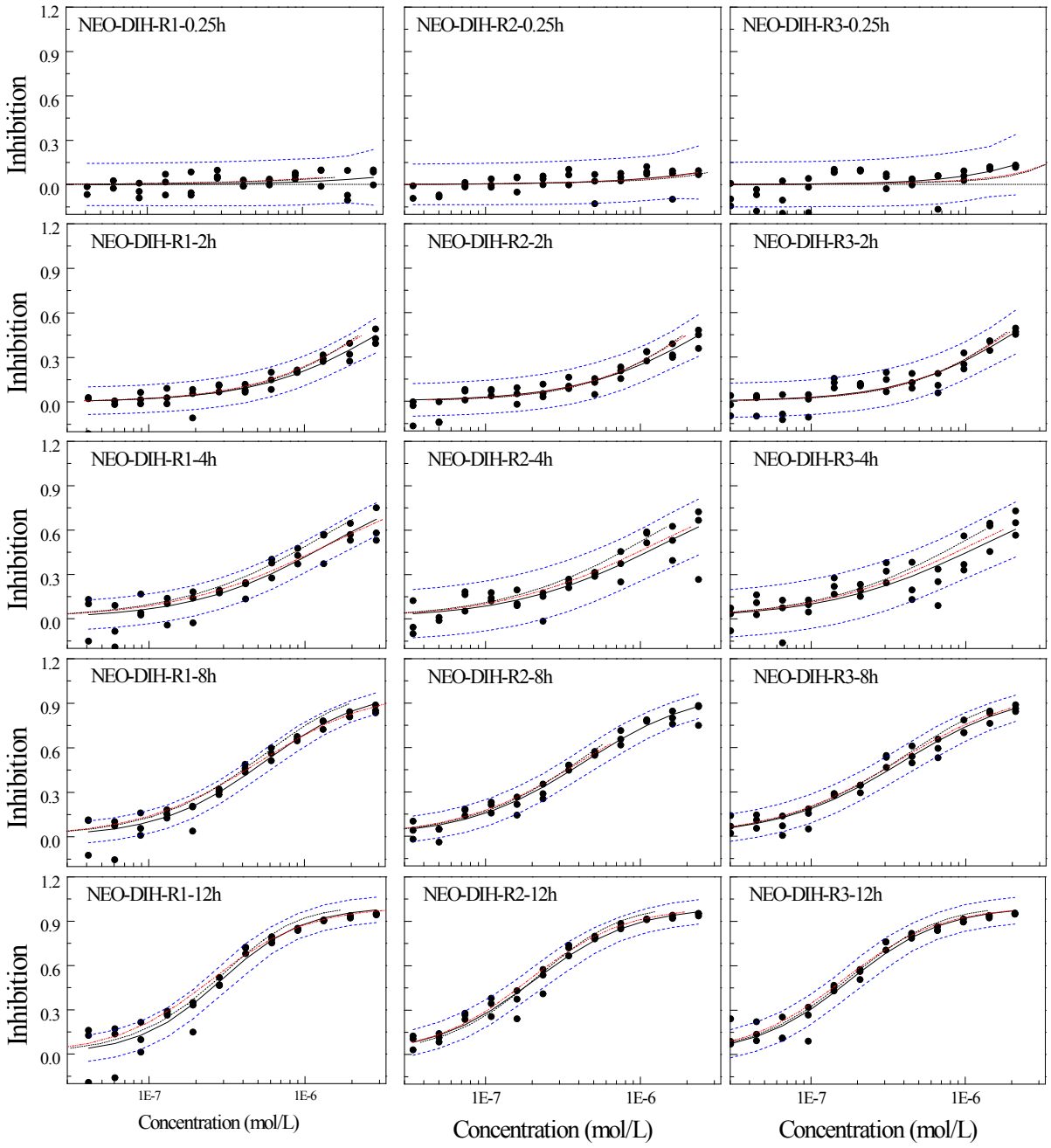


Fig. S2-5a The experimental concentration-response scatters (ஒ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R1, R2 and R3) in DIH-NEO mixture system at five time points.

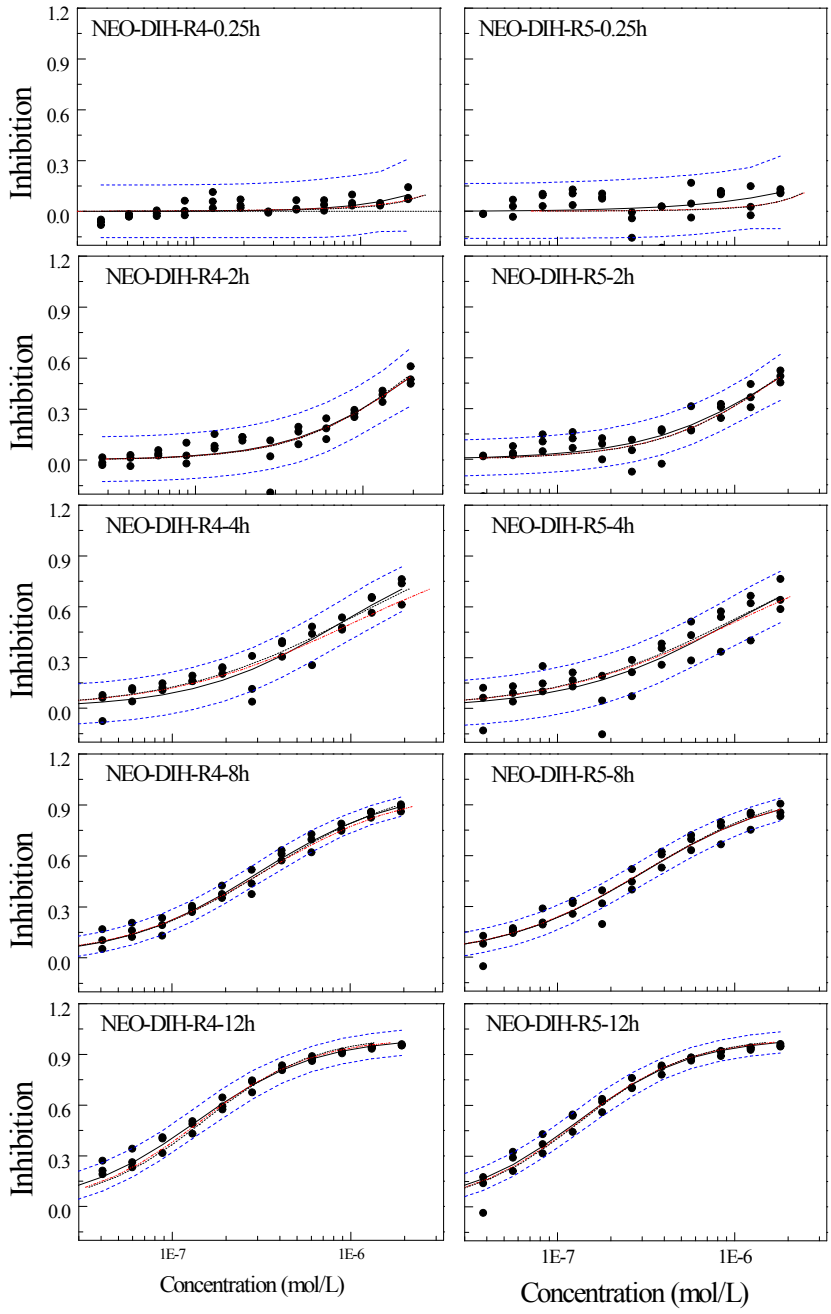


Fig. S2-5b The experimental concentration-response scatters (ஜ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R4 and R5) in DIH-NEO mixture system at five time points.

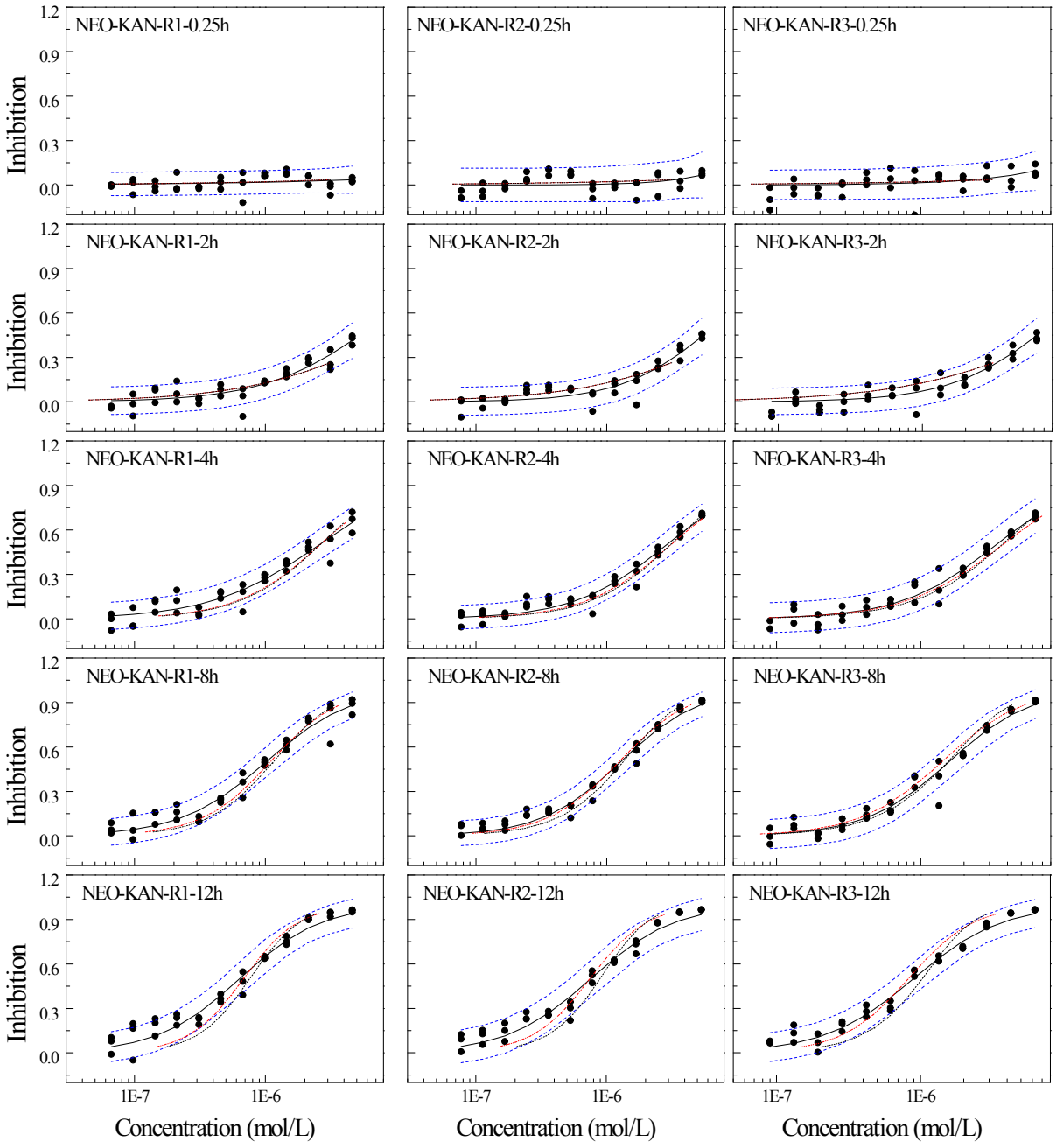


Fig. S2-6a The experimental concentration-response scatters (ஒ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R1, R2 and R3) in KAN-NEO mixture system at five time points.

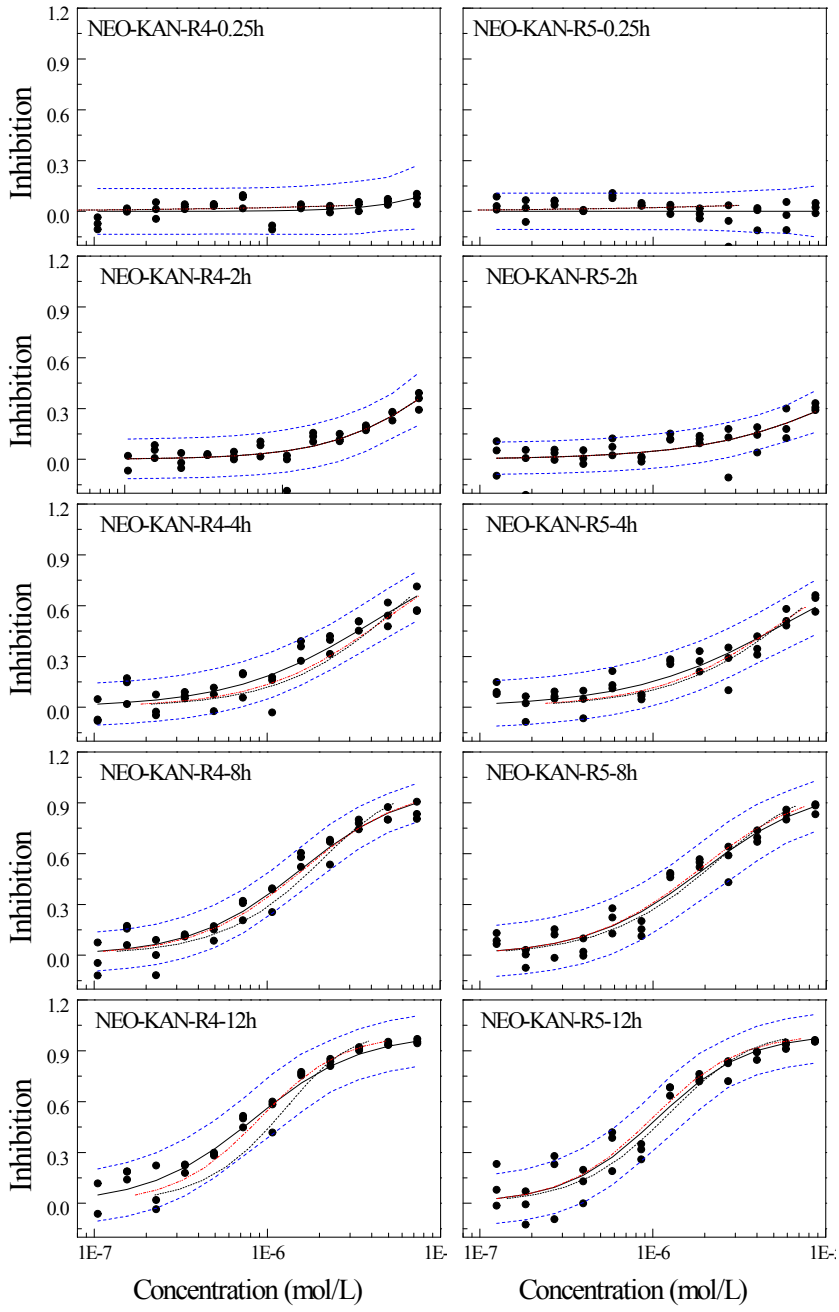


Fig. S2-6b The experimental concentration-response scatters (ꭥ), fitted curve (black solid line) and its 95% observation-based confidence intervals (blue dash line), and concentration- response curve predicted by the concentration addition (red dash line) of three rays (R4 and R5) in KAN-NEO mixture system at five time points.