

Online Supporting Information S3b. A head-to-head comparison between the results predicted by **iLoc-Hum** and those by **Wolf PSORT** (Horton, et al. Nucleic Acids Res 35, W585-587) on the 300 independent single-location proteins in the [Online Supporting Information S3a](#). For facilitating comparison, the corresponding experimental subcellular locations as annotated in Swiss-Prot databank (Release 2011_06 of 31-May-11) are also given.

Protein accession number	iLoc-Hum	Wolf PSORT	Experimental result annotated in Swiss-Prot database
O15530	Cytoplasmic	Mitochondrion	Cytoplasmic
O60271	Cytoplasmic	Endoplasmic reticulum	Cytoplasmic
O94806	Cytoplasmic	Mitochondrion	Cytoplasmic
O94827	Cytoplasmic	Nuclear	Cytoplasmic
O95208	Cytoplasmic	Nuclear	Cytoplasmic
P06753	Cytoplasmic	Cytoplasmic	Cytoplasmic
P07437	Cytoplasmic	Cytoplasmic	Cytoplasmic
P07947	Cytoplasmic	Cytoplasmic	Cytoplasmic
P08107	Cytoplasmic	Cytoplasmic	Cytoplasmic
P08238	Cytoplasmic	Cytoplasmic	Cytoplasmic
P08631	Cytoplasmic	Cytoplasmic	Cytoplasmic
P09210	Cytoplasmic	Cytoplasmic	Cytoplasmic
P0CG30	Cytoplasmic	Mitochondrion	Cytoplasmic
P11142	Cytoplasmic	Cytoplasmic	Cytoplasmic
P11802	Cytoplasmic	Cytoplasmic	Cytoplasmic
P46439	Cytoplasmic	Cytoplasmic	Cytoplasmic
P48594	Cytoplasmic	Cytoplasmic	Cytoplasmic
P50224	Cytoplasmic	Cytoplasmic	Cytoplasmic
P50226	Cytoplasmic	Cytoplasmic	Cytoplasmic
P57078	Cytoplasmic	Nuclear	Cytoplasmic
P60709	Cytoplasmic	Cytoskeleton	Cytoplasmic
Q13464	Cytoplasmic	Nuclear	Cytoplasmic
Q15642	Cytoplasmic	Nuclear	Cytoplasmic
Q6ZTW0	Cytoplasmic	Peroxisomal	Cytoplasmic

Q8CJ53	Cytoplasmic	Nuclear	Cytoplasmic
Q8N264	Cytoplasmic	Nuclear	Cytoplasmic
Q96DB5	Cytoskeleton	Mitochondrion	Cytoplasmic
Q96K30	Cytoplasmic	Nuclear	Cytoplasmic
Q96KG9	Cytoplasmic	Nuclear	Cytoplasmic
Q9BQ89	Centrosome	Mitochondrion	Cytoplasmic
Q08014	Cytoskeleton	Cytoplasmic	Cytoskeleton
P20305	Cytoskeleton	Extracellular	Cytoskeleton
P13020	Cytoskeleton	Endoplasmic reticulum	Cytoskeleton
O61270	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q27319	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q28372	Cytoskeleton	Nuclear	Cytoskeleton
Q76LL6	Cytoplasm; Cytoskeleton	Nuclear	Cytoskeleton
Q9JJV2	Cytoplasm; Cytoskeleton	Extracellular	Cytoskeleton
Q09430	Cytoplasm; Cytoskeleton	Extracellular	Cytoskeleton
P62963	Cytoplasm; Cytoskeleton	Cytoplasmic	Cytoskeleton
Q26768	Cytoskeleton	Nuclear	Cytoskeleton
O13728	Cytoskeleton	Mitochondrion	Cytoskeleton
Q94053	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q9TVW5	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q21244	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q17856	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q18461	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q19832	Cytoskeleton	Cytoplasmic	Cytoskeleton
P53020	Cytoskeleton	Cytoplasmic	Cytoskeleton
P53019	Cytoskeleton	Cytoplasmic	Cytoskeleton
P53018	Cytoskeleton	Cytoplasmic	Cytoskeleton
P13263	Cytoskeleton	Cytoplasmic	Cytoskeleton
P27440	Cytoskeleton	Cytoplasmic	Cytoskeleton
P13262	Cytoskeleton	Cytoplasmic	Cytoskeleton
P27439	Cytoskeleton	Cytoplasmic	Cytoskeleton

P53017	Cytoskeleton	Cytoplasmic	Cytoskeleton
P05634	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q23519	Cytoskeleton	Cytoplasmic	Cytoskeleton
Q6AYD6	Cytoplasm	Nuclear	Cytoskeleton
Q8R1G6	Cytoplasm	Nuclear	Cytoskeleton
O08601	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
O11982	Cytoplasmic	Cytoplasmic	Endoplasmic reticulum
O12674	Cytoplasmic	Cytoplasmic	Endoplasmic reticulum
O35949	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
O42707	Endoplasmic reticulum	Peroxisomal	Endoplasmic reticulum
O54998	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
O56850	Cytoplasmic	Cytoplasmic	Endoplasmic reticulum
O59833	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
O60568	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
O77588	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
O92374	Cytoplasmic	Cytoplasmic	Endoplasmic reticulum
O94401	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
O94491	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
P07308	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
P12244	Endoplasmic reticulum	Mitochondrion	Endoplasmic reticulum
P12337	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
P13011	Endoplasmic reticulum	Cytoplasmic	Endoplasmic reticulum
P13516	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
P16232	Endoplasmic	Extracellular	Endoplasmic

	reticulum		reticulum
P19324	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
P81999	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
Q29550	Endoplasmic reticulum	Endoplasmic reticulum	Endoplasmic reticulum
Q64176	Endoplasmic reticulum	Endoplasmic reticulum	Endoplasmic reticulum
Q64573	Endoplasmic reticulum	Endoplasmic reticulum	Endoplasmic reticulum
Q6AYY8	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
Q6P7B9	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
Q6QLL4	Endoplasmic reticulum	Peroxisomal	Endoplasmic reticulum
Q99KV1	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
Q9D1Q6	Endoplasmic reticulum	Extracellular	Endoplasmic reticulum
Q9TT94	Endoplasmic reticulum	Plasma membrane	Endoplasmic reticulum
A1EC31	Cytoplasmic	Endoplasmic reticulum	Extracellular
A2AJ76	Cytoplasmic	Plasma membrane	Extracellular
A2ASQ1	Cytoplasmic	Extracellular	Extracellular
E5KIB6	Cytoplasmic	Extracellular	Extracellular
O00468	Cytoplasmic	Extracellular	Extracellular
O00755	Extracellular	Mitochondrion	Extracellular
O09118	Cytoplasmic	Extracellular	Extracellular
O46378	Extracellular	Nuclear	Extracellular
O54767	Extracellular	Peroxisomal	Extracellular
O55189	Extracellular	Extracellular	Extracellular
O55196	Extracellular	Extracellular	Extracellular
O55225	Extracellular	Extracellular	Extracellular
O62702	Extracellular	Extracellular	Extracellular
O70283	Extracellular	Plasma membrane	Extracellular
O76536	Extracellular	Mitochondrion	Extracellular

O96530	Extracellular	Cytoskeleton	Extracellular
O97647	Extracellular	Nuclear	Extracellular
O97939	Extracellular	Extracellular	Extracellular
P00451	Extracellular	Extracellular	Extracellular
P00730	Extracellular	Extracellular	Extracellular
P00734	Extracellular	Extracellular	Extracellular
P00735	Extracellular	Extracellular	Extracellular
P00750	Extracellular	Extracellular	Extracellular
P00760	Extracellular	Extracellular	Extracellular
P00762	Extracellular	Extracellular	Extracellular
P00763	Extracellular	Extracellular	Extracellular
P00764	Extracellular	Extracellular	Extracellular
P00765	Extracellular	Cytoplasmic	Extracellular
P00768	Extracellular	Cytoplasmic	Extracellular
P00769	Extracellular	Cytoplasmic	Extracellular
A0AAS4	Golgi apparatus	Plasma membrane	Golgi apparatus
A0M8S7	Cytoplasmic	Cytoplasmic	Golgi apparatus
A1C8D8	Cytoplasmic	Plasma membrane	Golgi apparatus
A1DAY6	Cytoplasmic	Plasma membrane	Golgi apparatus
A1IGX5	Golgi apparatus	Extracellular	Golgi apparatus
A1L2S8	Cytoplasmic	Nuclear	Golgi apparatus
A1X149	Cytoplasmic	Cytoplasmic	Golgi apparatus
A1YGR5	Cytoplasmic	Endoplasmic reticulum	Golgi apparatus
A1YGR6	Cytoplasmic	Extracellular	Golgi apparatus
A2QHH4	Cytoplasmic	Plasma membrane	Golgi apparatus
A2RUV4	Cytoplasmic	Nuclear	Golgi apparatus
A2VDR8	Golgi apparatus	Cytoplasmic	Golgi apparatus
A2YCI3	Golgi apparatus	Plasma membrane	Golgi apparatus
A2YHR9	Golgi apparatus	Plasma membrane	Golgi apparatus
A2YU42	Golgi apparatus	Plasma membrane	Golgi apparatus
A2ZAK8	Golgi apparatus	Plasma membrane	Golgi apparatus
A4K2N5	Golgi apparatus	Plasma membrane	Golgi apparatus
A4K2W1	Golgi apparatus	Plasma membrane	Golgi apparatus

A5PJ65	Golgi apparatus	Plasma membrane	Golgi apparatus
A6ZS37	Golgi apparatus	Cytoplasmic	Golgi apparatus
A6ZZS6	Golgi apparatus	Plasma membrane	Golgi apparatus
A8XP14	Golgi apparatus	Peroxisomal	Golgi apparatus
A8Y236	Cytoplasmic	Golgi apparatus	Golgi apparatus
B0F9L4	Golgi apparatus	Cytoplasmic	Golgi apparatus
P35670	Endoplasmic reticulum; Golgi apparatus; Plasma membrane	Plasma membrane	Golgi apparatus
P61106	Golgi apparatus	Cytoplasmic	Golgi apparatus
P61204	Golgi apparatus; Lysosomal	Cytoplasmic	Golgi apparatus
P62330	Golgi apparatus; Lysosomal	Cytoplasmic	Golgi apparatus
P84077	Golgi apparatus; Lysosomal	Cytoplasmic	Golgi apparatus
P84085	Golgi apparatus; Lysosomal	Mitochondrion	Golgi apparatus
A5PF10	Lysosomal	Plasma membrane	Lysosomal
A6BMK7	Lysosomal	Nuclear	Lysosomal
A7MB63	Lysosomal	Plasma membrane	Lysosomal
B1H1P9	Lysosomal	Plasma membrane	Lysosomal
B5FYY5	Lysosomal	Mitochondrion	Lysosomal
B5X7X4	Lysosomal	Mitochondrion	Lysosomal
O00906	Lysosomal	Extracellular	Lysosomal
O02467	Lysosomal	Cytoplasmic	Lysosomal
O18835	Lysosomal	Extracellular	Lysosomal
O19015	Lysosomal	Extracellular	Lysosomal
O35604	Lysosomal	Plasma membrane	Lysosomal
O35657	Lysosomal	Extracellular	Lysosomal
O46427	Lysosomal	Extracellular	Lysosomal
O60931	Lysosomal	Plasma membrane	Lysosomal
O75503	Lysosomal	Cytoplasmic	Lysosomal
O76856	Lysosomal	Extracellular	Lysosomal
O77695	Lysosomal	Plasma membrane	Lysosomal

O89023	Lysosomal	Extracellular	Lysosomal
O97524	Lysosomal	Extracellular	Lysosomal
P00786	Lysosomal	Extracellular	Lysosomal
P00787	Lysosomal	Extracellular	Lysosomal
P00795	Lysosomal	Cytoskeleton	Lysosomal
P04988	Lysosomal	Extracellular	Lysosomal
P04989	Lysosomal	Extracellular	Lysosomal
P06760	Lysosomal	Extracellular	Lysosomal
P07154	Lysosomal	Extracellular	Lysosomal
P07602	Lysosomal	Plasma membrane	Lysosomal
P07688	Lysosomal	Extracellular	Lysosomal
P09648	Lysosomal	Extracellular	Lysosomal
P11456	Lysosomal	Extracellular	Lysosomal
O15528	Mitochondrion	Mitochondrion	Mitochondrion
O43772	Mitochondrion	Plasma membrane	Mitochondrion
O75027	Mitochondrion	Plasma membrane	Mitochondrion
O75324	Mitochondrion	Extracellular	Mitochondrion
O75616	Mitochondrion	Mitochondrion	Mitochondrion
O94826	Mitochondrion	Endoplasmic reticulum	Mitochondrion
O95258	Mitochondrion	Plasma membrane	Mitochondrion
O95674	Mitochondrion	Plasma membrane	Mitochondrion
P00156	Mitochondrion	Plasma membrane	Mitochondrion
P00414	Mitochondrion	Plasma membrane	Mitochondrion
P0C869	Mitochondrion	Mitochondrion	Mitochondrion
P10176	Mitochondrion	Mitochondrion	Mitochondrion
P19099	Mitochondrion	Mitochondrion	Mitochondrion
P22557	Mitochondrion	Extracellular	Mitochondrion
P23368	Mitochondrion	Mitochondrion	Mitochondrion
P25874	Mitochondrion	Cytoplasmic	Mitochondrion
P27144	Mitochondrion	Mitochondrion	Mitochondrion
P27338	Mitochondrion	Cytoplasmic	Mitochondrion
P29803	Mitochondrion	Mitochondrion	Mitochondrion
P36404	Mitochondrion	Cytoplasmic	Mitochondrion

P40305	Mitochondrion	Plasma membrane	Mitochondrion
P49419	Mitochondrion	Mitochondrion	Mitochondrion
P49448	Mitochondrion	Mitochondrion	Mitochondrion
P49675	Mitochondrion	Mitochondrion	Mitochondrion
P50336	Mitochondrion	Extracellular	Mitochondrion
P55851	Mitochondrion	Mitochondrion	Mitochondrion
P55916	Mitochondrion	Cytoplasmic	Mitochondrion
P60602	Mitochondrion	Extracellular	Mitochondrion
P62072	Mitochondrion	Extracellular	Mitochondrion
Q00796	Mitochondrion	Cytoplasmic	Mitochondrion
O14802	Nuclear	Cytoplasmic	Nuclear
O15016	Nuclear	Nuclear	Nuclear
O15047	Nuclear	Nuclear	Nuclear
O15084	Nuclear	Nuclear	Nuclear
O15151	Nuclear	Nuclear	Nuclear
O15156	Nuclear	Nuclear	Nuclear
O15178	Nuclear	Nuclear	Nuclear
O15265	Nuclear	Nuclear	Nuclear
O15350	Nuclear	Nuclear	Nuclear
O15353	Nuclear	Nuclear	Nuclear
O15504	Nuclear	Nuclear	Nuclear
O43189	Nuclear	Nuclear	Nuclear
O43248	Nuclear	Nuclear	Nuclear
O43316	Nuclear	Nuclear	Nuclear
O43543	Nuclear	Cytoplasmic	Nuclear
O43680	Nuclear	Nuclear	Nuclear
O43683	Nuclear	Nuclear	Nuclear
O43829	Nuclear	Nuclear	Nuclear
O60231	Nuclear	Nuclear	Nuclear
P0CG13	Nuclear	Cytoplasmic	Nuclear
P39687	Nuclear	Cytoplasmic	Nuclear
P52655	Nuclear	Cytoplasmic	Nuclear
P52945	Nuclear	Extracellular	Nuclear

P53350	Nuclear	Cytoplasmic	Nuclear
P54725	Nuclear	Mitochondrion	Nuclear
P55769	Nuclear	Cytoplasmic	Nuclear
Q4JDL3	Nuclear	Cytoplasmic	Nuclear
Q7Z7K6	Nuclear	Mitochondrion	Nuclear
Q9UI95	Nuclear	Extracellular	Nuclear
Q9UMS4	Cytoplasmic	Cytoplasmic	Nuclear
A5PJL1	Peroxisomal	Mitochondrion	Peroxisomal
A6H7C2	Peroxisomal	Peroxisomal	Peroxisomal
B3DMA2	Peroxisomal	Nuclear	Peroxisomal
O00116	Peroxisomal	Cytoplasmic	Peroxisomal
O14136	Peroxisomal	Cytoplasmic	Peroxisomal
O14832	Peroxisomal	Mitochondrion	Peroxisomal
O18778	Peroxisomal	Mitochondrion	Peroxisomal
O35078	Peroxisomal	Extracellular	Peroxisomal
O35386	Peroxisomal	Mitochondrion	Peroxisomal
O49506	Peroxisomal	Cytoplasmic	Peroxisomal
O59807	Peroxisomal	Cytoplasmic	Peroxisomal
O60065	Peroxisomal	Cytoplasmic	Peroxisomal
O70597	Peroxisomal	Mitochondrion	Peroxisomal
O74934	Peroxisomal	Cytoplasmic	Peroxisomal
O74936	Peroxisomal	Cytoplasmic	Peroxisomal
O75192	Peroxisomal	Mitochondrion	Peroxisomal
O80845	Peroxisomal	Cytoplasmic	Peroxisomal
O89016	Peroxisomal	Plasma membrane	Peroxisomal
O94227	Peroxisomal	Extracellular	Peroxisomal
O94516	Peroxisomal	Nuclear	Peroxisomal
O96011	Peroxisomal	Cytoplasmic	Peroxisomal
P00371	Peroxisomal	Extracellular	Peroxisomal
P07872	Peroxisomal	Cytoplasmic	Peroxisomal
P09110	Peroxisomal	Mitochondrion	Peroxisomal
P09118	Peroxisomal	Cytoplasmic	Peroxisomal
P14293	Peroxisomal	Cytoplasmic	Peroxisomal

P16164	Peroxisomal	Cytoplasmic	Peroxisomal
Q8BGI5	Peroxisomal	Peroxisomal	Peroxisomal
Q9JJK3	Peroxisomal	Peroxisomal	Peroxisomal
Q9JJK4	Peroxisomal	Peroxisomal	Peroxisomal
A0FGR8	Plasma membrane	Nuclear	Plasma membrane
A0FGR9	Plasma membrane	Cytoplasmic	Plasma membrane
A4D1S5	Plasma membrane	Cytoplasmic	Plasma membrane
A6NJW9	Plasma membrane	Mitochondrion	Plasma membrane
A6NKC4	Plasma membrane	Extracellular	Plasma membrane
A6NLE4	Plasma membrane	Extracellular	Plasma membrane
A8K4G0	Plasma membrane	Extracellular	Plasma membrane
A8MPY1	Plasma membrane; Synapse	Plasma membrane	Plasma membrane
O00212	Plasma membrane	Extracellular	Plasma membrane
O00451	Plasma membrane	Extracellular	Plasma membrane
O00526	Plasma membrane	Extracellular	Plasma membrane
O14610	Plasma membrane	Cytoplasmic	Plasma membrane
O14786	Plasma membrane	Endoplasmic reticulum	Plasma membrane
O14798	Plasma membrane	Extracellular	Plasma membrane
O14910	Plasma membrane	Cytoplasmic	Plasma membrane
O15165	Plasma membrane	Cytoplasmic	Plasma membrane
O43300	Plasma membrane	Peroxisomal	Plasma membrane
O60235	Plasma membrane	Extracellular	Plasma membrane
O60262	Plasma membrane	Cytoplasmic	Plasma membrane
O76036	Plasma membrane	Extracellular	Plasma membrane
O94772	Plasma membrane	Extracellular	Plasma membrane
O94779	Plasma membrane	Extracellular	Plasma membrane
O95057	Plasma membrane	Cytoplasmic	Plasma membrane
O95497	Plasma membrane	Extracellular	Plasma membrane
P35414	Plasma membrane	Plasma membrane	Plasma membrane
P35462	Plasma membrane	Plasma membrane	Plasma membrane
P36021	Plasma membrane	Plasma membrane	Plasma membrane
P36382	Plasma membrane	Plasma membrane	Plasma membrane

P36383	Plasma membrane	Plasma membrane	Plasma membrane
P37288	Plasma membrane	Plasma membrane	Plasma membrane
