

Online Supporting Information S3a. The degenerate testing dataset used for a head-to-head comparison between **Wolf PSORT** (Horton, et al. *Nucleic Acids Res* 35, W585-587) and **iLoc-Hum** of this paper. The dataset contains 300 single-location proteins classified into the following nine subcellular location sites: (1) cytoplasmic, (2) cytoskeleton, (3) endoplasmic reticulum, (4) extracellular, (5) Golgi apparatus, (6) lysosomal, (7) mitochondrion, (8) nuclear, (9) peroxisomal, and (10) plasma membrane, with each containing 30 protein sequences that were randomly picked from Swiss-Prot database (Release 2011_06 of 31-May-11). To avoid bias, none of the proteins included here occurs in the training dataset of **Wolf PSORT**, nor in the training dataset of **iLoc-Hum**. See the text of the paper for further explanation.

(1) 30 cytoplasmic proteins

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>O94401

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>P13011

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>P13516

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>P19324

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>P49419

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>O14802

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>O15016

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>O15084

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>O15265

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>O15350

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>O15353

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>O15504

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>O43189

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>O43248

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>O43316

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>O43543

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>O43680

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>O43683

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>O80845

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>O94227

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>P36021

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>P36382

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>P36383

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>P37288

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