

表 2 公布的蛋白质亚细胞定位预测工具的集合

Table 2 A collection of published protein subcellular localization prediction tool

工具名称	位置或蛋白质的功能预测	生物类	出版的参考文献
Tool name	Locations or protein features predicted	Organism categories	Publication citation
TargetP	出版的引文 Extracellular, mitochondrial, chloroplast	非植物、植物 Non-plant, plant	Emanuelsson et al., 2000
TMHMM	跨膜螺旋 Transmembrane helices	任何 Any	Krogh et al., 2001
ScanProsite (PS-Scan)	内质网保留信号 ER retention signal	任何 Any	de Castro et al., 2006
SecretomeP 2.0	非经典即非信号肽引发的蛋白质分泌 Non-classical i.e. not signal peptide triggered protein secretion	革兰氏阳性菌、革兰氏阴性细菌、哺乳动物 Gram-positive bacteria, gram-negative bacteria, mammal	Bendtsen et al., 2004a
Phobius	信号肽和跨膜结构 Signal peptide and transmembrane topology	任何 Any	Käll et al., 2007
WoLF PSORT	>5个位置 > 5 locations	真菌、植物、动物 Fungi, plant, animal	Horton et al., 2007
PRED-LIPO	Lipoprotein signal peptides	革兰氏阴性菌 Gram-positive bacteria	Bagos et al., 2008
ProLoc-GO	>5个位置 > 5 locations	人类和真核生物 Human and eukaryotes	Huang et al., 2008
KnowPredsite	>5个位置 > 5 locations	原核生物和真核生物 Prokaryotes and eukaryotes	Lin et al., 2009
MultiLoc2	>5个位置 > 5 locations	动物、真菌、植物 Animal, fungal, plant	Blum et al., 2009
PRED-SIGNAL	信号肽 Signal peptides	古生菌 Archaea	Bagos et al., 2009
RSLPred	细胞质、叶绿体、线粒体、细胞核 Chloroplast, cytoplasm, mitochondria, nucleus	仅稻类 <i>Oryza sativa</i> only	Kaundal and Raghava, 2009
SherLoc2	>5个位置 > 5 locations	动物、真菌、植物 Animal, fungi, plant	Briesemeister et al., 2009
Cell-PLoc 2.0	>5个位置 > 5 locations	真核生物、人类、植物、病毒、革兰氏阳性菌、 革兰氏阴性菌 Eukaryote, human, plant, virus, gram-positive bacteria, gram-negative bacteria	Chou and Shen, 2010
CoBaltDB	>5个位置 > 5 locations	原核生物 Prokaryotes	Goudenège et al., 2010
PSORTb	>5个位置 > 5 locations	革兰氏阳性菌、革兰氏阴性菌 Gram-positive and gram-negative bacteria	Yu et al., 2010
SCLPred	细胞质、线粒体、细胞核、分泌物、叶绿体 Cytoplasm, mitochondrion, nucleus, secretory, chloroplast	动物、真菌、植物 Animals, plants, fungi	Mooney et al., 2011
SignalP 4.0	信号肽 Signal peptide	真核生物、革兰氏阳性菌、革兰氏阴性菌 Eukaryotic, gram-positive bacteria, gram-negative bacteria	Petersen et al., 2011
SlocX	>5个位置 > 5 locations	仅拟南芥 <i>Arabidopsis thaliana</i> only	Ryngajllo et al., 2011