

LEA Phage Display Hits

In-frame hits from phage display pans with *GmPM28* (Glyma08g18400) from Arabidopsis seed library (LB) 1 and SL2 at 25°C and 41°C. Hits: the total number of sequences encountered encoding this protein for this library, whether it was identical or not. Independent clones: those encoding the same protein but from different pans of the same library or different lengths cDNA.

In-frame hits of <i>GmPM28</i> at 25°C using SL1 after 4 rounds of panning				
Hits	Locus Identifier	Protein Identity	Independent clones	Authority / Subcellular Residence
7	AT1G15280	CASC3/Barentsz eIF4AIII binding	7	<u>Predictors:</u> SubLoc - nucleus; WoLFPSORT – nucleus
1	AT1G30610	EMB88, EMB2279 pentatricopeptide (PPR) repeat-containing protein	1	<u>Predictors:</u> iPSORT - plastid; MitoPred - mitochondrion; MultiLoc - plastid; PeroxP - peroxisome; Predotar - plastid; SubLoc - nucleus; TargetP - plastid; WoLFPSORT - nucleus
1	AT2G02160	CCCH-type zinc finger family protein	1	<u>Predictors:</u> MitoPred – mitochondrion; SubLoc – nucleus; WoLFPSORT - nucleus
1	AT3G63400	Cyclophilin-like peptidyl-prolyl cis-trans isomerasefamily protein	1	<u>Predictors:</u> SubLoc – nucleus
In-frame hits of <i>GmPM28</i> at 41°C using SL1 after 4 rounds of panning				
Hits	Locus Identifier	Protein Identity	Independent clones	Authority / Subcellular Residence
3	AT1G15280.1	CASC3/Barentsz eIF4AIII binding	2	<u>Predictors:</u> SubLoc - nucleus; WoLFPSORT – nucleus
5	AT1G30610.1	EMB88, EMB2279 pentatricopeptide (PPR)repeat-containing protein	4	<u>Predictors:</u> iPSORT - plastid; MitoPred - mitochondrion; MultiLoc - plastid; PeroxP - peroxisome; Predotar - plastid; SubLoc - nucleus; TargetP - plastid; WoLFPSORT – nucleus
In-frame hits of <i>GmPM28</i> at 25°C using SL2 after 4 rounds of panning				
Hits	Locus Identifier	Protein Identity	Independent clones	Authority / Subcellular Residence
8	AT5G44120	CRA1, ATCRA1, CRU1 RmlC-like cupins superfamily	1	SUBA MS/MS: plasma membrane; <u>Predictors:</u> Predotar - endoplasmic reticulum; SubLoc - nucleus; TargetP - extracellular; WoLFPSORT – vacuole
In-frame hits of <i>GmPM28</i> at 41°C using SL2 after 4 rounds of panning				
Hits	Locus Identifier	Protein Identity	Independent clones	Authority / Subcellular Residence
1	AT2G19540	Transducin family protein / WD-40 repeat family protein	1	<u>Predictors:</u> SubLoc - cytosol; WoLFPSORT – mitochondrion
2	AT4G04470	PMP22 Peroxisomal membrane 22 kDa (Mpv17/PMP22) family protein	1	SUBA MS/MS: peroxisome - 18931141; plasma membrane - 19334764 <u>Annotators:</u> TAIR - peroxisome; AmiGO – peroxisome <u>Predictors:</u> iPSORT - mitochondrion; LOctree - mitochondrion; MitoPred - mitochondrion; Mitoprot 2 - mitochondrion; MultiLoc - mitochondrion; PeroxP - no data; Predotar - no data; SubLoc - mitochondrion; TargetP - mitochondrion; WoLFPSORT - plastid
4	AT5G18380	Ribosomal protein S5 domain 2-like superfamily	3	<u>Annotators:</u> UniProt : cytosol <u>Predictors:</u> iPSORT - plastid; LOctree - cytosol; Mitoprot 2 - mitochondrion; SubLoc - mitochondrion; WoLFPSORT – cytosol