

## Product datasheet for TP515745

### Ptprn2 (NM\_011215) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse protein tyrosine phosphatase, receptor type, N polypeptide 2 (Ptprn2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR215745 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MGPPLPLLLLLLPPPLPRALPAPASARGRQLPGRGLGCLFEDGLCGSLETVCVNDGVFGRQCQKVPVMDTYR  
YEVPFGALLHLKVTLQKLSRTGFTWQDDYTQRVIAQELANLPKAYLWHGETSGPPRSLQQNADNEKWFSL  
EREVALAKTLRRYLPYLELLSQPTANAHSRIDHETRPAKGEDSSPENILTYVAHTSALTYPPATRAKYP  
DNLLRPF SRLQPDELSPKVDGIDKQKLI AALGAYTAQRLPGENDPEPRYL VHGSSRAPRPF SATALSQR  
WPPPPGDAKDSPSMDDDTLLQSLKDLQQNSEVDRLGPLKEEKADSVAGAIQSDPAEGSQESHGRGAEGQ  
PREQTDAPETMLQDHRLSEVDDPVYKEVNRLSFQLGDLKDYGSPLLPEGPLLEKSSREEIKKSEQPEEV  
LSSEETAGVEHVRSRTYSKDLFERKPNSEPQPRRLEDQFQNRAPELWEDEESLKLAAQGPSGGLQLEV  
QPSEEQQGYILTGNPLSPEKKGQLMDQVAHILRVPSSFFADIKVLGPAVTFKVSANIQNM TTTADV KAA  
ADNKDQLEKATGLTILQSGIRPKGKLLKLLPHQEEQEDSTKFILLTFLSIACILGVLLASSLAYCLRHNH  
YKLDKLSGLGADPSADATEAYQELCRQRMVVRPQDRSEGPHTSRINSVSSQFSDGPMPSARSSTSSW  
SEEPVQSNMDISTGHMILAYMEDHLKNKNRLEKEWEALCAYQAEPNSSLVAQREENAPKNRSLAVLTYDH  
SRILLKSQNSHGSSDYINASPIMDHDPRNPAYIATQGPLPATVADFWQMVWESGCAVIVMLTPLSENGVR  
QCHHYWPDEGSNLYHVYEVNLVSEHIWCQDFLVR SFYLNKLNLTNETRTVTQFHFLSWYDQGVPSSTRSLL  
DFRRKVNKCYRGRSCPIIVHCSDGAGRSPTYVLIDMVLNKMMAKGAKEIDIAATLEHLRDRQPRGMVQTKEQ  
FEFALTAVAEVNAIKALPQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	111.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_035345</a>
<b>Locus ID:</b>	19276
<b>UniProt ID:</b>	<a href="#">P80560</a> , <a href="#">Q3UU93</a> , <a href="#">A3KN68</a>
<b>RefSeq Size:</b>	4688
<b>Cytogenetics:</b>	12 62.65 cM
<b>RefSeq ORF:</b>	3006
<b>Synonyms:</b>	4930425H11Rik; IA2beta; mKIAA0387; phogrin; Phol; PTP-NP
<b>Summary:</b>	<p>Plays a role in vesicle-mediated secretory processes (PubMed:21732083). Required for normal accumulation of secretory vesicles in hippocampus, pituitary and pancreatic islets. Required for the accumulation of normal levels of insulin-containing vesicles and preventing their degradation (PubMed:21732083). Plays a role in insulin secretion in response to glucose stimuli (PubMed:15220191, PubMed:16418280, PubMed:21732083). Required for normal accumulation of the neurotransmitters norepinephrine, dopamine and serotonin in the brain. In females, but not in males, required for normal accumulation and secretion of pituitary hormones, such as luteinizing hormone (LH) and follicle-stimulating hormone (FSH) (PubMed:16269463). Required to maintain normal levels of renin expression and renin release (PubMed:19019914). May regulate catalytic active protein-tyrosine phosphatases such as PTPRA through dimerization (PubMed:12364328). Has phosphatidylinositol phosphatase activity; the PIPase activity is involved in its ability to regulate insulin secretion. Can dephosphorylate phosphatidylinositol 4,5-bisphosphate (PI(4,5)P2), phosphatidylinositol 5-phosphate and phosphatidylinositol 3-phosphate (By similarity). Regulates PI(4,5)P2 level in the plasma membrane and localization of cofilin at the plasma membrane and thus is indirectly involved in regulation of actin dynamics related to cell migration and metastasis; upon hydrolyzation of PI(4,5)P2 cofilin is released from the plasma membrane and acts in the cytoplasm in severing F-actin filaments (By similarity). [UniProtKB/Swiss-Prot Function]</p>