

Product datasheet for **MG222130**

Ptprb (NM_029928) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ptprb (NM_029928) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ptprb
Synonyms:	3230402H02Rik; C130094E24; Ptpz; Rptpb; VE-PTP; Veptp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222130 representing NM_029928 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGAGGCATGGAGCCCTAACGGCCTTGTGGATAACACTGAGCGTCGTGCAGACTGGAGTGGCAGAGC
AAGTGAATGTAACCTCACACTGTTGGAGTCCAGGTCTCTAGCTTGTACAGCTATCCAGTGGAGGAC
TTTCGCGTCACCCTGTAACCTTAGCCTCATCTACAGCAGTGATACCTCGGGGCCATGTGGTGCCATCCT
ATTCGGATAGACAACCTTACCTACGGATGTAACCCCAAGGATTTACAAGCAGGGACCGTCTATAACTTCA
GGATTGTTTCTCTGGATGGAGAAGAGAGCACTCTGGTCTTACAGACAGATCCGTTGCCTCCTGCCAGGTT
TGAAGTCAATCGGGAGAAAACAGCATCAACCACCCTGCAGGTCCGGTGGACTCCCTCTTCTGGAAAAGTC
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CCTCTAGGCGAATGGGAGAAATACATCATTTTCGTTGATGGACAGAGAGCTCTTGGTCATCCACAAGTCAC
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 ATGTGAATCCAGAGTATCACAGAGATGCAATCTACTCGAGACAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222130 representing NM_029928
 Red=Cloning site Green=Tags(s)

MLRHGALTALWITL SVVQTGVAEQVKCNFTLLESRVSSLSASIQWRTFASPCNFSLIYSSDTS GPMWCHP
 IRIDNFTYGCNPKDLQAGTVYNFRIVSLDGEESTLVLQTDPLPPARFEVNREKTASTTLQVRWTPSSGKV
 SWYEVQLFDHNNKIQEVQVQESTTWSQYTFNLNTEGNSYKVAITAVSGEKRSFPVYINGSTVPSPVKDL
 GISPNNPNSLLISWSRSGNVEQYRLVLMKGAIVQDNTVDRRDTSYAFHELTPGHLNLTIVTMASGLQN
 SRWKLVRTAPMEVSNLKVNTDGRLLTSLNVKQKPPGDVDSYSITLSHQGTIKESKTLAPPVTTETQFKDLV
 PGRLYQVTI SCISIGELSAEKSAAGRTVPEKVRNLVSYNEIWMKSFVNWTPPAGDWEHYRIVLFNLSVLV
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 PLGEWEKYIISLMDRELLVIHKSLSKDAKEFTFDLMPGRNYKATVTSMSGDLKQSSSIKGRVPAQVTD
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 SSLTPGRLYNVTVTTKSGNYASHSFTEERTVPDKVQGISVNSARSYDLKVSWHVHATGDFDHYEYTIKNR
 ESFIQTKTIPKSENECEFIELVPGRLYSVTVSTKSGQYEASEQGTGRTIPEPVKDLTLLNRSTEDLHVTW
 SRANGDVQYEVQLLFNDMKVFPHIHLVNTATEYKFTALTPGRHYKILVLTISGDVQSAFIEGLTVPST
 VKNIIHISANGATDRLMVTWSPGGDVDSYVVSFRQDEKVDSTIPKHASEHTFHREAGAKYRIAIVSV
 SGLRNQIDALGQTVPASVQGVVAANAYSSNSLTVSWQKALGVAERYDILLNENGLLLSNVSEPARQ
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 FL YNPDRTLQERAQVDPLVQSFQNLQGRMYKMI VTHSGELSNESFIFGRVPAAVNHLKGSRNTTDS
 LWF SWSPASGDFDFYELILYNPNGTKKENWKEKDVTEWRFQGLVPGRKYTLVYVTHSGDL SNKVTGEGRT
 APSPPSLLSFADVANTSLAITWKPPDWDYDFELQWFGDALTIFNPYSSRKSEGRIVYGLHPGRSYQ
 FSVKTVSGDSWKTYSKPISGSRVTKPKIQNLHCRPQNSTAIACSWIPPDSDFDGYSIECRKMDTQEIF
 SRKLEKEKSLNIMMLVPHKRYLVSIKQVSGAMTSEVVEDSTITMIDRPPQPPPHIRVNEKDVLSKSSI
 NFTVNCWFSDTNGAVKYFAVVVREADSMDELKPEQQHPLPSYLEYRHNASIRVYQTNFYASKCAESPD
 SSKSFNIKLGAE MDSLGGKCDPSQKFCDGPLKPHTAYRISIRAF TQLFDEDLKEFTKPLYS DTF SMP
 ITTESEPLFGVIEGVSAGLFLIGMLVALVAFFICRQKASHSRERPSARLSIRDRPLSVHLNLGQKGRKT
 SCPIKINQFEGHFMKLQADSNYLLSKEYEDLKDVGRSQSCDIALLPENRGKNRYNNILPYDASRVKLCNV
 DDDPCSDYINASYIPGNFRREYIATQGPLPGTKDDFWKMAWEQNVHNI VMVTQCVEKGRVKCDHYWPA
 DQPLYYGDLILQMVSESVLPEWTIREFKICSEEQLDAHRLIRHFHYTVWPDHGVPETTQSLIQFVRTVRD
 YINRSPGAGPTVVHCSAGVGRGTGFVALDRILQQLDSKDSVDIYGAVHDLRLHRVHMVQTECQYVYLHQ
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TRTRPLE - GFP Tag - V

Restriction Sites:

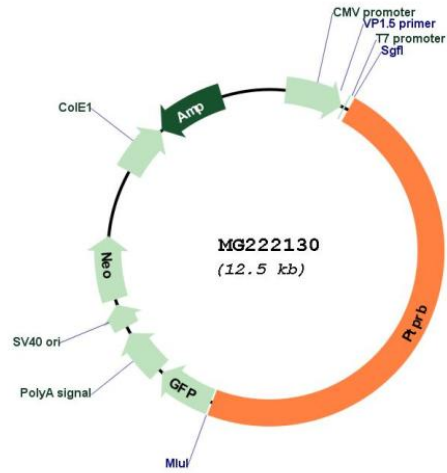
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_029928
 ORF Size: 5994 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).</p>
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<p>NM_029928.2, NP_084204.2</p>
RefSeq Size:	<p>11912 bp</p>
RefSeq ORF:	<p>5997 bp</p>
Locus ID:	<p>19263</p>
UniProt ID:	<p>B2RU80</p>
Cytogenetics:	<p>10 D2</p>
Gene Summary:	<p>Plays an important role in blood vessel remodeling and angiogenesis. Not necessary for the initial formation of blood vessels, but is essential for their maintenance and remodeling. Can induce dephosphorylation of TEK/TIE2, CDH5/VE-cadherin and KDR/VEGFR-2. Regulates angiopoietin-TIE2 signaling in endothelial cells. Acts as a negative regulator of TIE2, and controls TIE2 driven endothelial cell proliferation, which in turn affects blood vessel remodeling during embryonic development and determines blood vessel size during perinatal growth. Essential for the maintenance of endothelial cell contact integrity and for the adhesive function of VE-cadherin in endothelial cells and this requires the presence of plakoglobin.[UniProtKB/Swiss-Prot Function]</p>