

Product datasheet for **RC200853**

PLPBP (NM_007198) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLPBP (NM_007198) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLPBP
Synonyms:	EPVB6D; PROSC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200853 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGAGAGCTGGCAGCATGTCGGCCGAGCTGGGAGTCGGTGCGCATTGCGGGCGGTGAACGAGCGCG
TGCAGCAGGCTGTGGCGCGCGGCCGCGGGATCTCCAGCCATCCAGCCCCGGCTAGTGGCGGTGAGCAA
AACCAAACCTGCAGACATGGTGATCGAGGCCTATGGACATGGGCAGCGCACTTTTGGCGAGAACTACGTT
CAGGAAGTCTAGAAAAAGCATCAAATCCCAAATTCGTCTTTGTGTCCTGAGATCAAATGGCACTTCA
TTGGCCACCTACAGAAACAAAATGTCAACAAATGATGGCTGTCCCAATCTCTTCATGCTGAAACAGT
GGATTCTGTGAAGTTGGCAGACAAAGTGAACAGTTCCTGGCAGAGAAAAGTTCTCCTGAAAGTTAAAG
GTTATGGTCCAGATTAACACCAGCGGAGAAGAGAGTAAACATGGCCTTCCACCTCAGAGACCATAGCCA
TCGTGGAGCACATAAACGCCAAGTGTCTAACCTGGAGTTTGTGGGGCTGATGACCATAGGAAGCTTTGG
GCATGATCTTAGTCAAGGACCAAATCCAGACTTCCAGCTGTTATTGTCCCTCCGGGAGGAGCTGTGTAAA
AAGCTGAACATCCCTGCTGACCAGGTTGAGCTGAGCATGGGCATGTCCGCGGATTTCAGCATGCGGTTG
AAGTAGGATCTACAAATGTCCGAATAGGAAGCACGATTTTGGAGAGCGGGATTACTCAAAGAAACCCAC
CCCGACAAGTGCAGCAGACGTGAAGCCCCGCTGGAGGTGGCACAGGAGCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC200853 protein sequence
 Red=Cloning site Green=Tags(s)

MWRAGSMSAELGVGCALRAVNERVQQAVARRPRDLPAIQPRLVAVSKTKPADMVEIAYGHGQRTFGENYV
 QELLEKASNPKILSLCPEIKWHFIGHLQKQNVNKLMAVPNLFMLETVDSVKLADKVNSSWQRKGSPELTK
 VMVQINTSGEESKHGLPPSETIAIVEHINAKCPNLEFVGLMTIGSFGHDL SQGPNPDFQLLLSLREELCK
 KLNIPADQVELSMGMSADFQHAVEVGSTNVIRIGSTIFGERDYSKKPTPKCAADV KAPLEVAQEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6418_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007198

ORF Size: 825 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: 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).

Reconstitution Method:

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: [NM_007198.4](#)

RefSeq Size: 2586 bp

RefSeq ORF: 828 bp

Locus ID: 11212

UniProt ID: [O94903](#)

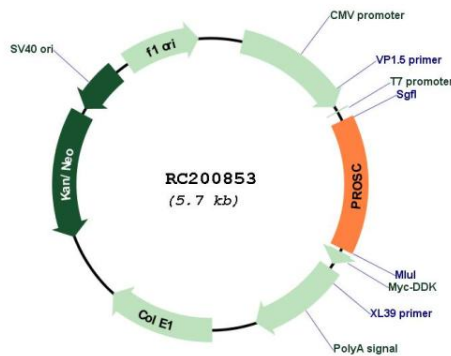
Cytogenetics: 8p11.23

Domains: Ala_racemase_N

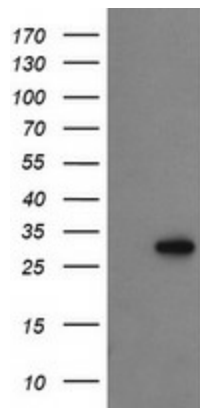
MW: 30.3 kDa

Gene Summary: This gene encodes a pyridoxal 5'-phosphate binding protein involved in the homeostatic regulation of intracellular pyridoxal 5'-phosphate. This gene has a tumor suppressive effect on hepatocellular carcinoma and other solid tumors of epithelial origin. Naturally occurring mutations in this gene are associated with a pyridoxine-dependent epilepsy. [provided by RefSeq, Mar 2017]

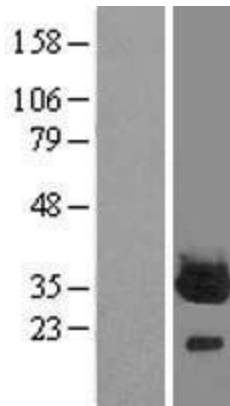
Product images:



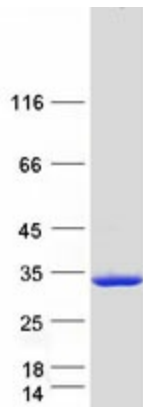
Circular map for RC200853



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PROSC (Cat# RC200853, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PROSC (Cat# [TA505162]). Positive lysates [LY416132] (100ug) and [LC416132] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416132]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200853 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLPBP protein (Cat# [TP300853]). The protein was produced from HEK293T cells transfected with PLPBP cDNA clone (Cat# RC200853) using MegaTran 2.0 (Cat# [TT210002]).