

Recombinant Rat PTPRF Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52516

Size: 10ug, 100ug

Protein Name: Receptor-type tyrosine-protein phosphatase F (EC 3.1.3.48) (Leukocyte common antigen related) (LAR)

Synonym: Ptp rf, Lar

UniProt ID: Q64604

UniProt Link: www.uniprot.org/uniprotkb/Q64604/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1898 AA

Molecular Weight: 211 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAPEPAPGRRMVPLVPALVMLGLMAGAHGDSKPVFVKVPEDQIGLSGGVASFVCQATGEPKPRIT
WMKKGKKVSSQRFEVIEFDDGAGSVLRIQPLRVQRDEAIYECTATNSLGEINTSAKLSVLEEDQLPS
GFPTIDMGPKLVVEKARTATMLCAAGGNPDPEISWFKDFLPVDPASSNGRIKQLRSGALQIESSEE
SDQGGKYECVATNSAGTRYAPANLYVRVRRVAPRFSIPPSSQEVMPGGNVNLTCVAVGAPMPYVK
WMMGAEELTKEDEMPVGRNVLELSNVMRSANYTCVAISSLGMIEATAQVTVKALPKPPIDLVTETT
ATSVTLTWDSGNTEPVSFYGIQYRAAGTDGPFQEVDGVASTRYSIGGLSPFSEYAFRVLAVNSIGRG
PPSEAVRARTGEQAPSSPPRRVQARMLSASTMLVQWEPPEEPNGLVRGYRVYYTPDSRRPLSAW
HKHNTDAGLLTTVGSLPGITYSLRVLAFATVGDGPPSPTIQVKTQQGVPAQPADFQAKAESDTRIQL
SWLLPPQERIIKYLWYAAEDEGQQHKVTFDPTSSYTLEDLKPDTLYHFQLAARSDLGVGVTPTV
EACTAQSTPSAPPQKVTCTVSTGSTTVRVSWVPPPADSRNGIITQYSVAYEAVDGEDRKRHVVDGIS
REHSSWDLGLLEKWTEYRVVWRAHTDVGPGEPPSVLVRDDEDVPSGPPRKVEVEPLNSTAVHVS
WKLVPVQKQHGQIRGYQVTYVRLENGEPGQPIIQDVMLAEAQETTISGLTPETTSITVAAYTTKGD
GARSKPKVVTGAVPGRPTMMVSTTAMHTALLQWHPKELPGELLYRLQYRRADEARPNTIDFG
KDDQHFTVTGLHKGATYIFRLAAKNRAGPGEEFEKEITTPEDAPSGFPQNLRVTLTSTTELAWD
PVLAEGRITNYTVYRDINSQHELQNVTDVHLTLLGLKPDTTYDIKVRHTSKGAGPLSPSIQSR
TMPMEQVFAKNFRVAAAMKTSVLLSWEVPSYKSAVPFKILYNGQSVEVDGHSRMRKLIADLQPNTE
YSFVLMNRGTSAGGLQHLVSIPTAPDLLPQKPLPASAFIEDGRFSLMPQVQDPSLVRWFYIVVPIID
RVGGNLLAPRWSTPEELELDELLEAIEQGEEKQRRRRRQAERLKPYYAAQVDELPTFTLGDKKNY



RGFYNRPLSPDLSYQCFVLASLKEPMDQKRYASSPYSDEIVVQVTPAQQQEEPEMLWVTGPVLAVI
LIILIVIAILLFKRKRTTHSPSSKDEQSIGLKDSLLAHSSDPVEMRRLNYQTPGMRDHPPITDLADNIER
LKANDGLKFSQEYESIDPGQQTWENSNSSEVNKPKNRYANVIAYDHSRVLLTSIDGVPGSDYINANYI
DGYRKQNAYIATQGPLPETMGDFWRMVWEQRIATVVMTRLEEKSRVKCDQYWPARGTETYGLIQ
VTLVDTVELATYTMRTFALHKSGSSEKRELRFQFMAWPDHGVPEYPTPILAFLLRRVKACNPLDAGP
MVVHCSAGVGRGTGCFIVIDAMLERMKHEKTVDIYGHVTCMRSQRNYMVQTEDQYVFIHEALLEAAM
CGHTEVLARNLYAHIQKLGQVPPGESVTAMELEFKLLAGSKARASRFISANLPCNKFKNRLVNIMPYE
LTRVCLQPIRGVEGSDYINASFLDGYRQQKAYIATQGPLAESTEDFWRMLWEHNSTIIVMLTKLREM
GREKCHQYWPAERSARYQYFVVDPMAYNMPQYILREFKVTDARDGQSRTIRQFQFTDWPEQGVP
KTGEGFIDFIGQVHKTEQFGQDGPITVHCSAGVGRGTGVFITLSIVLERMRYEGVVDMMFQTVKTLRTQ
RPAMVQTEDQYQLCYRAALEYLGSFDHYAT

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Receptor-type tyrosine-protein phosphatase F (EC 3.1.3.48) (Leukocyte common antigen related) (LAR) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Possible cell adhesion receptor. It possesses an intrinsic protein tyrosine phosphatase activity (PTPase) and dephosphorylates EPHA2 regulating its activity.; The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one.

Subcellular Localization: Membrane; Single-pass type I membrane protein.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.