

Recombinant Mouse LTBP1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51763

Size: 10ug, 100ug

Protein Name: Latent-transforming growth factor beta-binding protein 1 (LTBP-1)
(Transforming growth factor beta-1-binding protein 1) (TGF-beta1-BP-1)

Synonym: Ltbp1

UniProt ID: Q8CG19

UniProt Link: www.uniprot.org/uniprotkb/Q8CG19/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1712 AA

Molecular Weight: 187 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAGAWLRWGLLLWAGLLAWSAHGRVRRITYVVRPGPLPAGALPLAGPPRTFNVALDARYSRSSST
AASSRALAGPPAERTRRTSQPGGAALPGLRSPLPEPARPGGPSRQLHSKAGAQTAVTRFAKHGR
QVVR SQVQQDAQSAGGSRLQVQQKQQLQGINVCGGQCCHGWSKPPGSQRCTKPSCVPPCQNG
GMCLRPQLCVCKPGSKGKACEITAAQDTMPPAFGGQNP GSSWAPLEQAAKHTSTKKADTLPRVSP
VAQMTLTLKPKPSMGLSQQIHPQVAPLSSQNV MIRHGQTQEYLLKPKYFPAPKVVS AEQSTEGSFSL
RYGQEQGTAPFQVSNHTGRIKVFTPSICKVTCTKGNCQNSCQKGNTTTLISENGHAADTLTATNFR
VVICHLPCMNGGQCSSRD KCQCPPNFTGKLCQIPVLGASMPKLYQHAQQQGKALGSHVIHSTHTLP
LTMTSQQGVKVKFPPNIVNIHV KHPPEASVQIHQVSRIDSPGGQKVKEAQP GQSQVSYQGLPVQKT
QTVHSTYSHQQLIPHVYPVAAKTQLGRCFQETIGSQCGKALPGLSKQEDCCGTVGT SWGFNKCQK
CPKKQSYHG YTQMMECLQGYKRVNNTFCQDINECQLQGVCPNGECLNTMG SYRCSCKMGFGPDP
TFSSCVPDP PVI SEEGPCYRLVSPGRHCMHPLSVHLTKQICCCSVGKAWGPHCEKCPLPGTA AFK
EICPGMGMYTVSGVHRRRIHQHIGKEAVYVKPKNTQPVAKSTHPPPLPAKEEPVEALTSSWEHGP
RGAEP EVTAPPEKEIPSLDQEKTRLEPGQPQLSPGVSTIHLHPQFPVVVEKTSP PVPVEVAPEAST
SSASQVIAPTQVTEINECTVNP DICGAGHCINLPVRYTCICYEGYKFSEQLRKCDVIDECAQVRHLCS
QGRCENTEGSFLCVCPAGFMASEEGTNCIDVDECLRPDMCRDGR CINTAGAFRCEYCDSGYRMSR
RGYCEDIDECLKPSTCPEEQCVNTPGSYQCV PCTEGFRGWNGQCLDVDECLQPKVCTNGSCTNLE
GSYMC SCHRGYSPTPDHRHCQDIDECQQGNLCMNGQCRNTDGSFRCTCGQGYQLSAAKDQCEDI
DECEHHHLC SHGQCRNTEGSFQCVCNQQGYRASVLGDH CEDINECLEDS SVCQGGDCINTAGSYDC



TCPDGFQLNDNKGCCDINECAQPGLCGSHGECLNTQGSFHCVCCEQGFSSISADGRTCEDIDECVNN
TVCDSHGFCDNTAGSFRCLCYQGFQAPQDGGQGVNECELLSGVCGEAFCEENVEGSFLCVCAD
ENQEYSPMTGQCRSRVTEDSGVDRQPREEKKECYYNLNDASLCDNVLPNVTKQECCCTSGAGW
GDNCEIFPCPVQGTAEFTMCPRGKGLVPAGESSYDTGGENYKDADECLLFGEIICKNGYCLNTQP
GYECYCKQGTYYPVKLQCFDMDECQDPNSCIDGQCVNTEGSYNCFCTHPMVLDASEKRCVQPTE
SNEQIEETDVYQDLCWEHLSEEYVCSRPLVGKQTTYTECCCLYGEAWGMQCALCPMKDSDDYAQL
CNIPVTGRRRPYGRDALVDFSEQYGPETDPYFIQDRFLNSFEELQAECEGILNGCENGRCVRVQEG
YTCDCFDGYHLDMAKMTCDVDVNECESELNNRMSLCKNAKCINTEGSYKCLCLPGYIPSDKPNYCTPL
NSALNLDKESDLE

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 Latent-transforming growth factor beta-binding protein 1 (LTBP-1) (Transforming growth factor beta-1-binding protein 1) (TGF-beta1-BP-1) 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: Key regulator of transforming growth factor beta (TGFB1, TGFB2 and TGFB3) that controls TGF-beta activation by maintaining it in a latent state during storage in extracellular space. Associates specifically via disulfide bonds with the Latency-associated peptide (LAP), which is the regulatory chain of TGF-beta, and regulates integrin-dependent activation of TGF-beta. Outcompeted by LRRC32/GARP for binding to LAP regulatory chain of TGF-beta.

Subcellular Localization: Secreted . Secreted, extracellular space, extracellular matrix .

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.