

Recombinant Mouse LRC32 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51122

Size: 10ug, 100ug

Protein Name: Transforming growth factor beta activator LRRC32 (Garpin) (Glycoprotein A repetitions predominant) (GARP) (Leucine-rich repeat-containing protein 32)

Synonym: Lrrc32

UniProt ID: G3XA59

UniProt Link: www.uniprot.org/uniprotkb/G3XA59/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 663 AA

Molecular Weight: 72 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSHQILLLLAMLTGLAISQRREQVPCRTVNKEALCHGLGLLQVPSVLSLDIQALYLSGNQLQSILVSP
LGFYTLRHLDLSDNQISFLQAGVFQALPYLEHLNLAHNRLATGMALNSGGLGRPLLVSLDLSGNSL
HGNLVERLLGETPRLRTLSEAENSLTRLARHTFWGMPAVEQLDLHSNVLMIEDGAFAELPHLTHLN
LSRNSLTCISDFSLQQQLQVLDLSCNSIEAFQTAPEPQAQFQLAWLDLRENKLLHFPDLAVFPRLIYLVN
SNNLIQLPAGLPRGSEDLHAPSEGWSASPLSNPSRNASTHPLSQLLNLDLSYNEIELVPASFLEHLTS
LRFLNLSRNCLRSFEARQVDSLPCLVLLDLSHNVLEALELGTKVLGSLQTLQLQDNALQELPPYTFAS
LASLQRLNLQGNQVSPCGGPAEPGPPGCVDFSGIPTLHVLMAGNSMGMLRAGSFLHTPLTELDLS
TNPGLDVATGALVGLEASLEVLELQGNGLTVLRVDLPCFLRLKRLNLAENQLSHLPAWTRAVSLEVL
DLRNNFSFLLPGNAMGGLETSLRRLYLQGNPLSCCGNGWLAAQLHQGRVDVDATQDLICRFGSQE
ELSLSLVRPEDCEKGGLKNVNLILLLSFTLVSAIVLTTLATICFLRRQKLSQQYKA

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 Transforming growth factor beta activator LRRC32 (Garpin) (Glycoprotein A repetitions predominant) (GARP) (Leucine-rich repeat-containing protein 32) 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 (PubMed:25127859). 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 (PubMed:25127859, PubMed:28912269). Able to outcompete LTBP1 for binding to LAP regulatory chain of TGF-beta (By similarity). Controls activation of TGF-beta-1 (TGFB1) on the surface of activated regulatory T-cells (Tregs) (PubMed:25127859). Required for epithelial fusion during palate development by regulating activation of TGF-beta-3 (TGFB3) (PubMed:28912269).

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

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.