

Recombinant Mouse ITAL Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51335

Size: 10ug, 100ug

Protein Name: Integrin alpha-L (CD11 antigen-like family member A) (Leukocyte adhesion glycoprotein LFA-1 alpha chain) (LFA-1A) (Leukocyte function-associated molecule 1 alpha chain) (Lymphocyte antigen 15) (Ly-15) (CD antigen CD11a)

Synonym: Itgal, Lfa-1, Ly-15

UniProt ID: P24063

UniProt Link: www.uniprot.org/uniprotkb/P24063/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1162 AA

Molecular Weight: 128 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSFRIAGPRLLLLGLQLFAKAWSYNLDTRPTQSFLAQAGRHFGYQVLQIEDGVVVGAPGEGDNTGG
LYHCRTSSEFCQPVSLHGSNHTSKYLGMTLATDAAKGSLLACDPGLSRTCDQNTYLSGLCYLFPQS
LEGPMQLQNPAYQECMKGKVDLVFLFDGSQSLDRKDFEKILEFMKDVMRKLSTSYQFAAVQFSTD
CRTEFTFLDYVKQKNPNPDVLLGSVQPMFLLTNTFRAINYYVAHVFEESGARPDA TKVLVIITDGEAS
DKGNISA AH DITRYIIGIGKHFVSVQKQKTLHIFASEPV EEFVKILDTFEKLKDLFTDLQRR IYAIEGTNR
QDLTSFNMELSSSGISADLSKGHAVVGAVGAKDWAGGFLDLREDLQGATFVGQEPLTSDVRGGYL
GYTVAWMTSRSSRPLLAAGAPRYQHVGQVLLFQAPEAGGRWNQTQKIEGTQIGSYFGGELCSVDL
DQDGEAE LLLIGAPLFFGEQRGGRVFTYQRRQSLFEMVSELQGDPGYPLGRFGAAITALTDINGDRL
TDVAVGAPLEE QGAVYIFNGKPGGLSPQPSQRIQGAQVFP GIRWFGRSIHGVKDLGGDRLADV VVG
AEGRVVVLSSRPVVDVVT ELSFSPEEIPVHEVECSYSAREEQKHGVK LKACFRIKPLTPQFQGRLLA
NLSYTLQLDGHMRMRSGLPDGSHEL SGNTSITPDKSCLDFHFHFPIQDLISPINVS LNFSLLEEEG
TPRDQKVGRAMQPILRPSIHTVTKEIPFEKNCGEDKKCEANLTLSSPARSGPLRLMSSASLAVEWTL
SNSGEDAYWVRLDLDFPRGLSFRKVEMLQPHSRMPVSCEELTEGSSLLTKTLKCNVSSPIFKAGQE
VSLQVMFNTLLNSSWEDFVELNGTVHCENENSSLQEDNSAATHIPVLYPVNILTKEQENSTLYISFTP
KGPKTQQVQH VYQVRIQPSAYDHNMP TLEALVGVPWPHSED PITYTWSVQTDPLVTCHSEDLKRPS
SEAEQPCLPGVQFRCPIVFRREILIQVTGTVELSKEIKASSTLSLCSSLSVSFNSSKH FHLYGSKASEA



QVLVKVDLIHEKEMLHVYVLSGIGGLVLLFLIFLALYKVGFFKRNLKEKMEADGGVPNGSPPEDTDPL
AVPGEETKDMGCGLEPLRESDKD

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 Integrin alpha-L (CD11 antigen-like family member A) (Leukocyte adhesion glycoprotein LFA-1 alpha chain) (LFA-1A) (Leukocyte function-associated molecule 1 alpha chain) (Lymphocyte antigen 15) (Ly-15) (CD antigen CD11a) 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: Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4 (PubMed:2051027). Integrin ITGAL/ITGB2 is a receptor for F11R. Integrin ITGAL/ITGB2 is a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed:29100055). Involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. Contributes to natural killer cell cytotoxicity. Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:16234355, PubMed:24158516). Acts as a platform at the immunological synapse to translate TCR engagement and density of the ITGAL ligand ICAM1 into graded adhesion (By similarity). Required for generation of common lymphoid progenitor cells in bone marrow, indicating a role in lymphopoiesis (PubMed:25108025). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (By similarity). Integrins ITGAL:ITGB2 functions as a receptor of the neuron-specific adhesion molecule ICAM5 ensuring neuron cell-leukocyte adhesion. Integrin ITGAL/ITGB2 that functions as a signaling receptor of ICAM2, ensuring leukocyte cell-cell adhesion on resting cells (By similarity).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein . Membrane raft .
Note=Upon antigen recognition by the TCR, is recruited to lipid rafts.

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.