

Recombinant Human LIRB4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50629

Size: 10ug, 100ug

Protein Name: Leukocyte immunoglobulin-like receptor subfamily B member 4 (B4) (CD85 antigen-like family member K) (Immunoglobulin-like transcript 3) (ILT-3) (Leukocyte immunoglobulin-like receptor 5) (LIR-5) (Monocyte inhibitory receptor HM18) (CD antigen CD85k)

Synonym: LILRB4, ILT3, LIR5

UniProt ID: Q8NHJ6

UniProt Link: www.uniprot.org/uniprotkb/Q8NHJ6/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 448 AA

Molecular Weight: 49 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MIPTFTALLCLGLSLGPRTHMQAGPLPKPTLWAEPGSVISWGNSTIWCQGTLEAREYRLDKEESPA
PWDRQNPLEPKNKARFSIPSMTEYAGRYRCYYRSPVGWSQPSDPLELVMTGAYSKPTLSALPSPL
VTSGKSVTLLCQSRSPMDTFLLIKERAHPLLHLRSEHGAQQHQAEFPMSPVTSVHGGTYRCFSSH
GFSHYLLSHPSDPLELIVSGSLEDPRPSPTRSVSTAAGPEDQPLMPTGSVPHSGLRRHWEVLIGVLV
VSILLLSLLLFLLLQHWQRQGHRTLAQRQADFQRPPGAAEPEPKDGGGLQRRSSPAADVQGENFCAA
VKNTQPEDGVEMDTRQSPHDEDPAQAVTYAKVKHSRPRREMASPPSPLSGEFLDTKDRQAEEDRQ
MDTEAAASEAPQDVTYAQLHSFTLRQKATEPPPSQEGASPAEPSVYATLAIH

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 Leukocyte immunoglobulin-like receptor subfamily B member 4 (B4) (CD85 antigen-like family member K) (Immunoglobulin-like transcript 3) (ILT-3) (Leukocyte immunoglobulin-like receptor 5) (LIR-5) (Monocyte inhibitory receptor HM18) (CD antigen CD85k) 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: Inhibitory receptor involved in the down-regulation of the immune response and the development of immune tolerance (PubMed:11875462). Receptor for FN1 (PubMed:34089617). Receptor for apolipoprotein APOE (PubMed:30333625). Receptor for ALCAM/CD166 (PubMed:29263213). Inhibits receptor-mediated phosphorylation of cellular proteins and mobilization of intracellular calcium ions (PubMed:9151699). Inhibits FCGR1A/CD64-mediated monocyte activation by inducing phosphatase-mediated down-regulation of the phosphorylation of multiple proteins including LCK, SYK, LAT and ERK, leading to a reduction in TNF production (PubMed:19833736). This inhibition of monocyte activation occurs at least in part via binding to FN1 (PubMed:34089617). Inhibits T cell proliferation, inducing anergy, suppressing the differentiation of IFNG-producing CD8+ cytotoxic T cells and enhancing the generation of CD8+ T suppressor cells (PubMed:16493035, PubMed:19833736, PubMed:29263213). Induces up-regulation of CD86 on dendritic cells (PubMed:19860908). Interferes with TNFRSF5-signaling and NF-kappa-B up-regulation (PubMed:11875462).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein . Note=Ligand binding leads to internalization and translocation to an antigen-processing compartment.

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.