

Recombinant Human LIRA2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50623

Size: 10ug, 100ug

Protein Name: Leukocyte immunoglobulin-like receptor subfamily A member 2 (CD85 antigen-like family member H) (Immunoglobulin-like transcript 1) (ILT-1) (Leukocyte immunoglobulin-like receptor 7) (LIR-7) (CD antigen CD85h)

Synonym: LILRA2, ILT1, LIR7

UniProt ID: Q8N149

UniProt Link: www.uniprot.org/uniprotkb/Q8N149/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 483 AA

Molecular Weight: 53 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTPILTVLICLGLSLGPRTHVQAGHLPKPTLWAEPGSVIIQGSPVTLRCQGSQAEEYHLYRENKSAS
WVRRIQEPGKNGQFPIPSITWEHAGRYHCQYYSHNHSSEYSDPLELVVTGAYSKPTLSALPSPVVT
GGNVTLCQCVSQVAFDGFILCKEGEDEHPQRLNSHSHARGWSWAIFSVGPVSPSRWSYRCYAYDS
NSPYVWSLPSDLELLVPGVSKKPSLSVQPGPMVAPGESLTLCVSDVGYDRFVLYKEGERDFLQR
PGWQPQAGLSQANFTLGPVSPSHGGQYRCYSAHNLSSEWSAPSDPLDILITGQFYDRPSLSVQPV
TVAPGKNVTLLCQSRGQFHTFLLTKEGAGHPPLHLRSEHQAQQNQAEFRMGPV TSAHVGTYRCYS
SLSSNPYLLSLPSDPLELVVSEAAETLSPSQNKTDSTTTSLGQHPQDYTVENLIRMGVAGLVLVVGLI
LLFEAQHSQSRSLQDAAGR

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 A member 2 (CD85 antigen-like family member H) (Immunoglobulin-like transcript 1) (ILT-1) (Leukocyte immunoglobulin-like receptor 7) (LIR-7) (CD antigen CD85h) 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: Part of the innate immune responses against microbial infection (PubMed:12529506, PubMed:27572839). Specifically recognizes a set of N-terminally truncated immunoglobulins that are produced via cleavage by proteases from a range of pathogenic bacteria and fungi, including *L.pneumophila*, *M.hyorhinis*, *S.pneumoniae*, *S.aureus* and *C.albicans* (PubMed:27572839). Recognizes epitopes that are in part in the variable region of the immunoglobulin light chains, but requires also the constant region for signaling (PubMed:27572839). Binds to a subset of cleaved IgM, IgG3 and IgG4 molecules, but does not bind cleaved IgA1 (PubMed:27572839). Binding of N-terminally truncated immunoglobulins mediates activation of neutrophils (PubMed:27572839). In monocytes, activation leads to the release of CSF2, CF3, IL6, CXCL8 and CCL3 and down-regulates responses to bacterial lipopolysaccharide (LPS), possibly via down-regulation of TLR4 expression and reduced signaling via TLR4 (PubMed:22479404). In eosinophils, activation by ligand binding leads to the release of RNASE2, IL4 and leukotriene C4 (PubMed:12529506). Does not bind class I MHC antigens (PubMed:19230061).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein .; [Isoform 4]: Secreted .

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.