

Recombinant Rat CLC4A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52528

Size: 10ug, 100ug

Protein Name: C-type lectin domain family 4 member A (C-type lectin superfamily member 6) (Dendritic cell inhibitory receptor) (CD antigen CD367)

Synonym: Clec4a, Clecsf6, Dcir

UniProt ID: Q67EQ0

UniProt Link: www.uniprot.org/uniprotkb/Q67EQ0/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 240 AA

Molecular Weight: 27 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MASEITYAEVRIKNESNSSVTYSGSPAAPREKPTRHLSKPGSLLVPFTSLMVLLLLLLAITFLVAFIIYFQK
YSQFLEEKKAIKGITHKELNCIKNVLLMEEKSWSCCPKNWKPFSGSHCYWVTKHTSTYSKASWSESE
KNCFSMGAHLLVIHSKEEQDFITGILNRDAAYFIGLWDSGHRQWQWVSQTPYNASATFWHKGEPSS
DDEKCVIINHLNSGWGWNIPCSGKQQSVCQMKKIQL

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 C-type lectin domain family 4 member A (C-type lectin superfamily member 6) (Dendritic cell inhibitory receptor) (CD antigen CD367) 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: C-type lectin receptor that binds carbohydrates mannose and fucose but also weakly interacts with N-acetylglucosamine (GlcNAc) in a Ca(2+)-dependent manner. Involved in regulating immune reactivity. Once triggered by antigen, it is internalized by clathrin-dependent endocytosis and delivers its antigenic cargo into the antigen presentation pathway resulting in cross-priming of CD8(+) T cells. This cross-presentation and cross-priming are enhanced by TLR7 and TLR8 agonists with increased expansion of the CD8(+) T cells, high production of IFNG and TNF with reduced levels of IL4, IL5 and IL13. In plasmacytoid dendritic cells, inhibits TLR9-mediated IFNA and TNF production. May be involved via its ITIM motif (immunoreceptor tyrosine-based inhibitory motifs) in the inhibition of B-cell-receptor-mediated calcium mobilization and protein tyrosine phosphorylation.

Subcellular Localization: Cell membrane ; Single-pass type II membrane protein ; Extracellular side .

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.