

Recombinant Human CLC4A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50198

Size: 10ug, 100ug

Protein Name: C-type lectin domain family 4 member A (C-type lectin DDB27) (C-type lectin superfamily member 6) (Dendritic cell immunoreceptor) (Lectin-like immunoreceptor) (CD antigen CD367)

Synonym: CLEC4A, CLECSF6, DCIR, LLIR, HDCGC13P

UniProt ID: Q9UMR7

UniProt Link: www.uniprot.org/uniprotkb/Q9UMR7/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 237 AA

Molecular Weight: 28 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTSEITYAEVRFKNEFKSSGINTASSAASKERTAPHKSN TGFPKLLCASLLIFFLLLAISFFIAFVIF FQK
YSQ LLEKKTTELKELVHTTLECVKKNMPVEETAWSCCPKNWKS FSSNCYFISTESASWQDSEKDCARM
EAHLLVINTQEEQDFIFQNLQEESAYFVGLSDPEGQRHWQWVDQTPYNESSTFWHPREPSDPNER
CVVLNFRKSPKRWGWNDVNCLGPQRSVCCEMMKIHL

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 DDB27) (C-type lectin superfamily member 6) (Dendritic cell immunoreceptor) (Lectin-like immunoreceptor) (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 (PubMed:27015765). Involved in regulating immune reactivity (PubMed:10438934, PubMed:18258799). 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 (PubMed:18258799, PubMed:20530286). In plasmacytoid dendritic cells, inhibits TLR9-mediated IFNA and TNF production (PubMed:18258799). 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 (PubMed:10438934).; (Microbial infection) Involved in the interaction between HIV-1 virus and dendritic cells. Enhances HIV-1 binding/entry and virus infection. Requires ITIM motif-associated signal transduction pathway involving phosphatases PTPN6 and PTPN11, SYK, Src kinases and MAP kinases.

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.