Recombinant CLC4C protein (His tag)

Catalog Number	540853
Synonyms	Blood dendritic cell antigen 2; BDCA-2; C-type lectin superfamily member 7; Dendritic lectin; CD antigen CD303
Species	Human
Expression System	E. coli
Accession	Q8WTT0
Molecular Weight	Predictes a molecular mass of 21.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	45-213
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 45-213 aa (Q8WTT0) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human CLEC4C (C-type lectin domain) Protein Fragment - A high-quality recombinant protein encompassing the complete C-type lectin domain (amino acids 45-213) of CLEC4C, also known as BDCA-2 or CD303. This fragment is specifically designed for studying galactose-terminated glycan recognition and dendritic cell antigen capture mechanisms. CLEC4C (C-type lectin domain family 4 member C) is a lectin-type cell surface receptor primarily expressed on plasmacytoid dendritic cells, where it functions as Blood Dendritic Cell Antigen 2 (BDCA-2) and CD303 antigen. The full-length protein plays crucial roles in antigen capturing by dendritic cells, specifically recognizing non-sialylated galactose-terminated biantennary glycans containing the Gal(β1-3/4)GlcNAc(β1-2)Man trisaccharide epitope. CLEC4C efficiently targets ligands into antigen-processing compartments for presentation to T-cells and mediates potent inhibition of interferon-alpha/beta expression induction in plasmacytoid dendritic cells. As a signaling receptor, it activates protein-tyrosine kinases and mobilizes intracellular calcium. The protein is localized to the cell membrane as a single-pass type II membrane protein, positioning it ideally for cell surface receptor studies and immune response investigations.