

Datasheet for ABIN7556202

CLEC4E Protein (AA 1-214) (His tag)



Overview

Quantity:	1 mg
Target:	CLEC4E
Protein Characteristics:	AA 1-214
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CLEC4E protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Clec4e Protein expressed in mammalian cells.
Sequence:	MNSTKSPASH HTERGCFKNS QVLSWTIAGA SILFLSGCFI TRCVVTYRSS QISGQNLQPH
	RNIKELSCYS EASGSVKNCC PLNWKHYQSS CYFFSTTTLT WSSSLKNCSD MGAHLVVIDT
	QEEQEFLFRT KPKRKEFYIG LTDQVVEGQW QWVDDTPFTE SLSFWDAGEP NNIVLVEDCA
	TIRDSSNSRK NWNDIPCFYS MPWICEMPEI SPLD Sequence without tag. The proposed
	Purification-Tag is based on experiences with the expression system, a different complexity
	of the protein could make another tag necessary. In case you have a special request, please
	contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.

- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Alternative Name:

Target:

Clec4e (CLEC4E Products)

CLEC4E

Background:

C-type lectin domain family 4 member E (C-type lectin superfamily member 9) (Macrophage-inducible C-type lectin) (Mincle),FUNCTION: Calcium-dependent lectin that acts as a pattern recognition receptor (PRR) of the innate immune system: recognizes damage-associated molecular patterns (DAMPs) of abnormal self and pathogen-associated molecular patterns (PAMPs) of bacteria and fungi (PubMed:18509109, PubMed:18490740, PubMed:18776906, PubMed:20008526, PubMed:19171887, PubMed:23602766). The PAMPs notably include mycobacterial trehalose 6,6'-dimycolate (TDM), a cell wall glycolipid with potent adjuvant immunomodulatory functions (PubMed:20008526, PubMed:23602766). Interacts with signaling adapter Fc receptor gamma chain/FCER1G to form a functional complex in myeloid cells (PubMed:23602766, PubMed:18776906). Binding of mycobacterial trehalose 6,6'-dimycolate (TDM) to this receptor complex leads to phosphorylation of the immunoreceptor tyrosine-based activation motif (ITAM) of FCER1G, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen-specific priming of T-cells toward effector T-helper 1 (Th1) and T-helper 17 (Th17) cell subtypes (PubMed:23602766). Also recognizes alpha-mannose residues on pathogenic fungi of the

Target Details

genus Malassezia and mediates macrophage activation (PubMed:19171887). Through recognition of DAMPs released upon nonhomeostatic cell death, enables immune sensing of damaged self and promotes inflammatory cell infiltration into the damaged tissue (PubMed:18776906). {ECO:0000269|PubMed:18490740, ECO:0000269|PubMed:18509109, ECO:0000269|PubMed:18776906, ECO:0000269|PubMed:19171887, ECO:0000269|PubMed:20008526, ECO:0000269|PubMed:23602766}.

Molecular Weight:

24.4 kDa

UniProt:

Q9R0Q8

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months