

Human CLEC1B / CLEC2 Protein (His Tag)

Catalog Number: 10976-H07H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

1810061I13Rik; CLEC2; CLEC2B; PRO1384; QDED721; 1810061I13Rik; Clec-2; Clec2

Protein Construction:

A DNA sequence encoding the human CLEC1B (NP_057593.3) extracellular domain (Gln 58-Pro 229) with a N-terminal polyhistidine tag was expressed.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 76 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its binding ability in a functional ELISA. 2. Immobilized human Podoplanin (Cat: 10012-H08H) at 10 µg/mL (100 µl/well) can bind? biotinylated human CLEC1B-His, The EC₅₀ of biotinylated human CLEC1B-His is 0.71 µg/mL.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The recombinant human CLEC1B comprises 188 amino acids with a predicted molecular mass of 22.7 kDa. As a result of glycosylation, the apparent molecular mass of rh CLEC1B is approximately 35-38 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

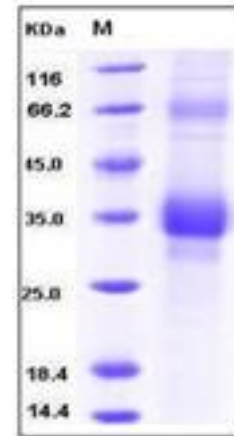
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CLEC1B, also known as CLEC2, is a C-type lectin-like receptor expressed in myeloid cells and NK cells. Natural killer (NK) cells express multiple calcium-dependent (C-type) lectin-like receptors, such as CD94 and NKG2D, that interact with major histocompatibility complex class I molecules and either inhibit or activate cytotoxicity and cytokine secretion. CLEC2 acts as a receptor for the platelet-aggregating snake venom protein rhodocytin. Rhodocytin binding leads to tyrosine phosphorylation and this promotes the binding of spleen tyrosine kinase (Syk) and initiation of downstream tyrosine phosphorylation events and activation of PLC-gamma-2. CLEC2 contains 1 C-type lectin domain and is expressed preferentially in the liver. It acts as an attachment factor for human immunodeficiency virus type 1 (HIV-1) and facilitates its capture by platelets.

References

1. Suzuki-Inoue K, *et al.* (2007) Involvement of the snake toxin receptor CLEC-2, in podoplanin-mediated platelet activation, by cancer cells. *J Biol Chem.* 282(36):25993-6001.
2. Watson AA, *et al.* (2007) The crystal structure and mutational binding analysis of the extracellular domain of the platelet-activating receptor CLEC-2. *J Biol Chem.* 282(5):3165-72.
3. Chaipan C, *et al.* (2006) DC-SIGN and CLEC-2 mediate human immunodeficiency virus type 1 capture by platelets. *J Virol.* 80(18):8951-60.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>