

Human CD9 / Tspan-29 Protein (His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 11029-H08H

General Information

Gene Name Synonym:

BTCC-1; DRAP-27; MIC3; MRP-1; TSPAN-29; TSPAN29

Protein Construction:

A DNA sequence encoding the second extracellular domain (Ser 112-Ile 195) of human CD9 (NP_001760.1) was fused with a polyhistidine tag at the C-terminus and a signal peptide at the N-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

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: Ser 112

Molecular Mass:

The recombinant human CD9 consists of 95 amino acids and predicts a molecular mass of 11 kDa as estimated 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:

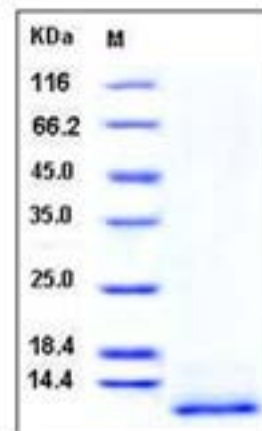
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD9 is a member of the transmembrane 4 superfamily, which is also known as the tetraspanin family. CD9 is a cell surface glycoprotein with 4 hydrophobic domains that is described to complex with integrins and other transmembrane 4 superfamily members. It is found expressed on the surface of the exosomes. The protein takes part in cellular signal transduction events and thus play a role in the regulation of cell development and activation, growth and motility. Besides, CD9 seems to be a key role in the egg-sperm fusion during the mammalian fertilization processes. CD9 is found on the membrane of the oocytes and also appears to intervene in maintaining the normal shape of oocyte microvilli.

References

- 1.Zola H, *et al.* (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
- 2.Ho IC, *et al.* (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.
- 3.Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12

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