Datasheet for ABIN4949005

VTCN1 Protein (AA 33-194) (His tag,AVI tag,Biotin)

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Overview

Quantity:	200 µg
Target:	VTCN1
Protein Characteristics:	AA 33-194
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VTCN1 protein is labelled with His tag,AVI tag,Biotin.
Application:	Functional Studies (Func)

Product Details

Brand:	MABSol®,PrecisionAvi
Sequence:	AA 33-194
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag. The protein has a calculated MW of 20.8 kDa. As a result of glycosylation, the protein migrates as 35-45 kDa under reducing (R) condition, and 35-45 kDa under non-reducing (NR) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	VTCN1
Alternative Name:	B7-H5 (VTCN1 Products)
Background:	Platelet receptor Gi24, also known as B7-H5 and stress-induced secreted protein-1 (Sisp-1), is a protein that in humans is encoded by the C10orf54 gene, which contains 1 Ig-like (immunoglobulin-like) domain. As for C10orf54 gene, C10orf54 appears to positively interact with BMP-4, potentiating BMP signaling and the transition from an undifferentiated to a differentiated state on ESCs. Human C10orf54 undergoes proteolytic cleavage by MT1-MMP, generating a soluble 30 kDa extracellular fragment plus a 25-30 kDa membrane-bound fragment.
Molecular Weight:	20.8 kDa

Application Details

Comment:	Ready-to-use AvitagTM biotinylated protein: The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA. This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.
Restrictions:	For Research Use only

Handling

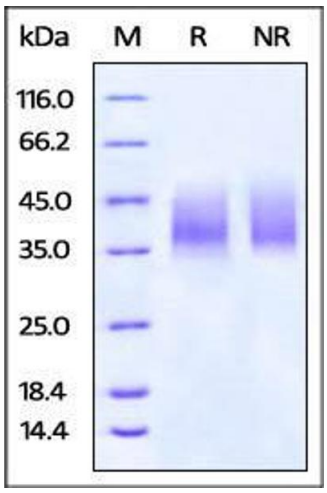
Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Publications

Product cited in:

Du, Hirabayashi, Ahn, Kren, Montgomery, Wang, Tiruthani, Mirlekar, Michaud, Greene, Herrera, Xu, Sun, Chen, Ma, Ferrone, Pylayeva-Gupta, Yeh, Liu, Savoldo, Ferrone, Dotti: "Antitumor Responses in the Absence of Toxicity in Solid Tumors by Targeting B7-H3 via Chimeric Antigen Receptor T Cells." in: **Cancer cell**, Vol. 35, Issue 2, pp. 221-237.e8, (2019) (PubMed).

Images



SDS-PAGE

Image 1. Biotinylated Human B7-H5 on SDS-PAGE under reducing (R) and no-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.