

Datasheet for ABIN6973295

TREM2 Protein (AA 19-174) (His tag,AVI tag,Biotin)



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2 Images

Overview

Quantity:	200 µg
Target:	TREM2
Protein Characteristics:	AA 19-174
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TREM2 protein is labelled with His tag,AVI tag,Biotin.

Product Details

Sequence:	AA 19-174
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	Rhesus macaque / Cynomolgus TROP-2 / TACSTD2 Protein, His Tag (MALS verified)
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	TREM2
Alternative Name:	TREM2 (TREM2 Products)

Target Details

Background: Triggering receptor expressed on myeloid cells 2 (TREM2) is a cell surface receptor of the immunoglobulin superfamily. The TREM2 is found in various tissue macrophages, such as CNS microglia, bone osteoclasts, alveolar, peritoneal and intestinal macrophages. TREM2 is also present on cultured bone marrow-derived macrophages and monocyte-derived dendritic cells. Some research have identified a rare variant of TREM2 that is a risk factor for Alzheimer disease (AD), which is the most common form of late-onset dementia. The extracellular region of TREM2 contains a single immunoglobulin superfamily domain and binds polyanionic ligands, such as bacterial lipopolysaccharide (LPS) and phospholipids⁸. Upon ligand binding, TREM2 transmits intracellular signals through an adaptor, DAP12 (also known as TYRO protein tyrosine kinase-binding protein (TYROBP)), which is associated with the transmembrane region of TREM2 and which recruits the protein tyrosine kinase SYK through its cytosolic immunoreceptor tyrosine-based activation motifs (ITAMs). TREM2 is a pro-tumorigenic marker of tumor-infiltrating macrophages in mouse models and human tumors that can be targeted to curb tumor growth and improve the efficacy of checkpoint blockade therapy while remodeling the landscape of tumor-infiltrating macrophages.

Molecular Weight: 21.0 kDa

Application Details

Comment: Ready-to-use Avitag™ biotinylated protein:
The product is exclusively produced using the Avitag™ 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.

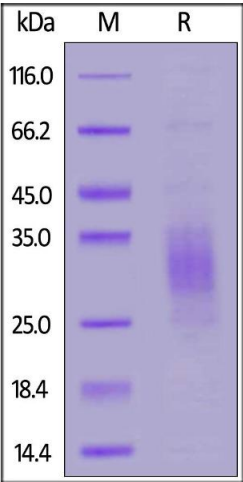
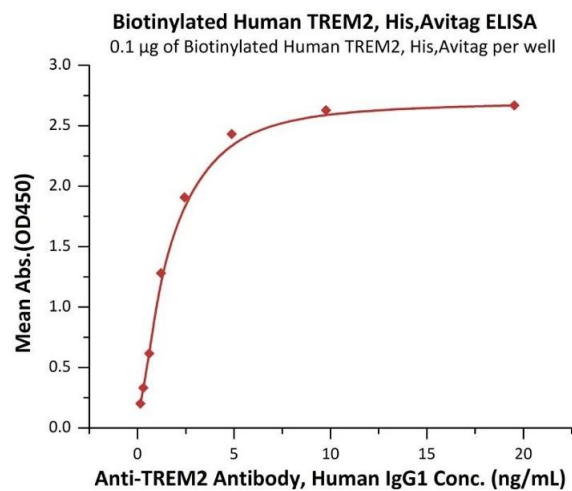
Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: PBS, pH 7.4

Storage: -20 °C



ELISA

Image 1. Immobilized Biotinylated Human TREM2, His,Avitag (ABIN6973295) at 1 µg/mL (100 µL/well) on streptavidin precoated (2 µg/well) plate can bind A Antibody, Human IgG1 with a linear range of 0.2-2 ng/mL (QC tested).

SDS-PAGE

Image 2. Biotinylated Human TREM2, His,Avitag™ on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 % .