Datasheet for ABIN3137677

Poliovirus Receptor Protein (PVR) (AA 21-343) (Fc Tag,AVI tag,Biotin)

3 Images

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Overview

Quantity:	200 µg
Target:	Poliovirus Receptor (PVR)
Protein Characteristics:	AA 21-343
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Poliovirus Receptor protein is labelled with Fc Tag,AVI tag,Biotin.

Product Details

Brand:	MABSol®,PrecisionAvi
Sequence:	AA 21-343
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 a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (Avitag™). The protein has a calculated MW of 63.5 kDa. As a result of Glycosylation, the protein migrates as 75-100 kDa under reducing (R) condition, and 140-180 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:	Poliovirus Receptor (PVR)
Alternative Name:	CD155 (PVR Products)
Background:	CD155 is a Type I transmembrane glycoprotein in the immunoglobulin superfamily. Commonly known as Poliovirus Receptor (PVR) due to its involvement in the cellular poliovirus infection in primates, CD155's normal cellular function is in the establishment of intercellular adherens junctions between epithelial cells. CD155/PVR was originally isolated based on its ability to mediate polio virus attachment to host cells. The fulllength (or CD155 alpha isoform) is synthesized as a 417 amino acid (aa) precursor that contains a 20 aa signal sequence, a 323 aa extracellular region, a 24 aa TM segment and a 50 aa cytoplasmic tail. The extracellular region contains one N terminal V type and two C2 type Ig like domains. CD155 is a transmembrane protein with 3 extracellular immunoglobulin-like domains, D1-D3, where D1 is recognized by the virus. Low resolution structures of CD155 complexed with poliovirus have been obtained using electron microscopy while a high resolution structures of theectodomain D1 and D2 of CD155 were solved by x-ray crystallography.
Molecular Weight:	63.5 kDa
NCBI Accession:	NP_006496
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Cell-Cell Junction Organization, Cancer Immune Checkpoints, SARS-CoV-2 Protein Interactome

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:	Tris with Glycine, Arginine and NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images

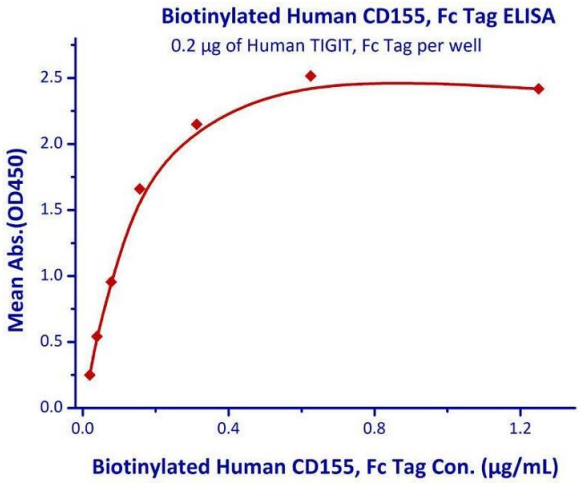


Image 1. Measured by its binding ability in a functional ELISA. Immobilized Human TIGIT, Fc Tag with a linear range of 0.02-0.15 μg/mL.

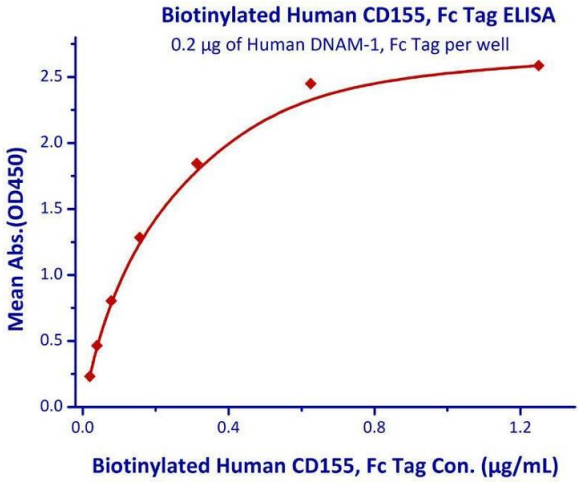
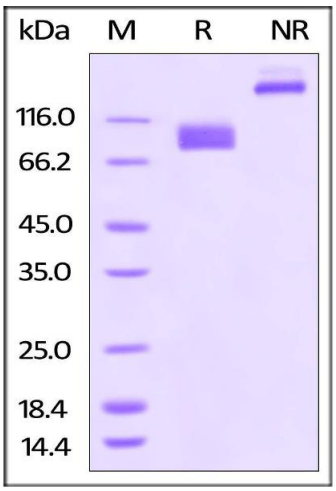


Image 2. Measured by its binding ability in a functional ELISA. Immobilized Human DNAM-1, Fc Tag with a linear range of 0.02-0.08 μg/mL.



SDS-PAGE

Image 3. Biotinylated Human CD155, Fc Tag 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%.