

## Product Information

### **MemDX™ Antibody Discovery - Human Integrin alpha 8 beta 1 (39-1012(ITGA8)&21-728(ITGB1)) Membrane Protein, Partial, -His -Avi tag & Tag free, [Biotin]**

Cat. No.: **MP0250F**

This product is for research use only and is not intended for diagnostic use.

This membrane protein is Human Integrin alpha 8 beta 1 (39-1012(ITGA8)&21-728(ITGB1)). It has been tested in SDS-PAGE, ELISA. We provide this protein to facilitate your membrane protein antibody discovery and development.

#### Product Specifications

##### Host Species

Human

##### Target Protein

Integrin alpha 8 beta 1

##### Protein Length

ECD

##### Molecular Weight

Calculated MW of 116.4 kDa (ITGA8) and 83.7 kDa (ITGB1). The non-reducing (NR) protein migrates as 140-150 kDa (ITGA8) and 100-115 kDa (ITGB1) respectively due to glycosylation.

##### Sequence

AA Phe 39 - Leu 1012 (ITGA8) & Gln 21 - Asp 728 (ITGB1) (Accession # P53708-1 (ITGA8) & P05556-1 (ITGB1)).

#### Product Description

##### Activity

Yes

##### Application

SDS-PAGE, ELISA

##### Expression Systems

HEK293

##### Tag

Subunit ITGA8 is fused with an acidic tail at the C-terminus and followed by a His tag and an Avi tag and subunit ITGB1 contains no tag but a basic tail at the C-terminus.

##### Protein Format

Soluble

**Form**

LYOPH

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

**Endotoxin**

<1.0 EU/μg by the LAL method

**Conjugation**

Biotin

**Purity**

>90% as determined by SDS-PAGE.

**Buffer**

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

**Storage**

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

**Target****Target Protein**

Integrin alpha 8 beta 1

**Full Name**

integrin subunit alpha 8&integrin subunit beta 1

**Introduction**

Integrins are heterodimeric transmembrane receptor proteins that mediate numerous cellular processes including cell adhesion, cytoskeletal rearrangement, and activation of cell signaling pathways. Integrins are composed of alpha and beta subunits. This gene encodes the alpha 8 subunit of the heterodimeric integrin alpha8beta1 protein. The encoded protein is a single-pass type 1 membrane protein that contains multiple FG-GAP repeats. This repeat is predicted to fold into a beta propeller structure. This gene regulates the recruitment of mesenchymal cells into epithelial structures, mediates cell-cell interactions, and regulates neurite outgrowth of sensory and motor neurons. The integrin alpha8beta1 protein thus plays an important role in wound-healing and organogenesis. Mutations in this gene have been associated with renal hypodysplasia/aplasia-1 (RHDA1) and with several animal models of chronic kidney disease. Alternate splicing results in multiple transcript variants encoding distinct isoforms.&Integrins are heterodimeric proteins made up of alpha and beta subunits. At least 18 alpha and 8 beta subunits have been described in mammals. Integrin family members are membrane receptors involved in cell adhesion and recognition in a variety of processes including embryogenesis, hemostasis, tissue repair, immune response and metastatic diffusion of tumor cells. This gene encodes a beta subunit. Multiple alternatively spliced transcript variants which encode different protein isoforms have been found for this gene.

**Alternative Names**

integrin alpha-8& CD29; FNRI; MDF2; VLAB; GPIIA; MSK12; VLA-BETA; integrin beta-1; glycoprotein IIa; integrin VLA-4 beta subunit; integrin beta 1; integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12); very late activation protein, beta polypeptide

**Gene ID**

[8516](#); [3688](#)

**UniProt ID**

[P53708](#); [P05556](#)