

Product Information

MemDX™ Antibody Discovery - Human Integrin alpha V beta 1 (31-992(ITGAV)&21-728(ITGB1)) Membrane Protein, Partial, -His -Avi tag & Tag free, [Biotin]

Cat. No.: **MP0305F**

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

This membrane protein is Human Integrin alpha V beta 1 (31-992(ITGAV)&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 V beta 1

Protein Length

ECD

Molecular Weight

Calculated MW of 114.7 kDa (ITGAV) and 83.7 kDa (ITGB1). The non-reducing (NR) protein migrates as 135-150 kDa (ITGAV) and 100-115 kDa (ITGB1) respectively due to glycosylation.

Sequence

AA Phe 31 - Val 992 (ITGAV) & Gln 21 - Asp 728 (ITGB1) (Accession # NP_002201.1 (ITGAV) & NP_002202.2 (ITGB1)).

Product Description

Activity

Yes

Application

SDS-PAGE, ELISA

Expression Systems

HEK293

Tag

ITGAV is fused with an acidic tail at the C-terminus. and followed by His tag and then 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

>95% as determined by SDS-PAGE.

Buffer

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH 7.5. 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 V beta 1

Full Name

integrin subunit alpha V&integrin subunit beta 1

Introduction

The product of this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha subunit and a beta subunit that function in cell surface adhesion and signaling. The encoded preproprotein is proteolytically processed to generate light and heavy chains that comprise the alpha V subunit. This subunit associates with beta 1, beta 3, beta 5, beta 6 and beta 8 subunits. The heterodimer consisting of alpha V and beta 3 subunits is also known as the vitronectin receptor. This integrin may regulate angiogenesis and cancer progression. Alternative splicing results in multiple transcript variants. Note that the integrin alpha 5 and integrin alpha V subunits are encoded by distinct genes. & 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

CD51; MSK8; VNRA; VTNR;CD51; MSK8; VNRA; VTNR; integrin alpha-V; antigen identified by monoclonal antibody L230; integrin alphaVbeta3; integrin, alpha V (vitronectin receptor, alpha polypeptide, antigen CD51); vitronectin receptor subunit alpha & CD29; FNRB; 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

[3685](#); [3688](#)

UniProt ID

[P06756](#); [P05556](#)