

Integrin alpha V beta 3 Protein, Human (Biotinylated, HEK293, His-Avi)

Cat. No.:	HY-P700765
Synonyms:	α V β 3; Integrin alpha V beta 3; beta3; alphaV; ITGAV&ITGB3; Integrin alpha V β 3; β 3
Species:	Human
Source:	HEK293
Accession:	P06756 (F31-V992)&P05106 (G27-D718)
Gene ID:	3685&3690
Molecular Weight:	90-145 kDa

PROPERTIES

Biological Activity	Immobilized Biotinylated Human ITGAV&ITGB3,His Tag at 0.5 μ g/mL (100 μ l/Well) onstreptavidin(5 μ g/mL) precoated plate. Doseresponse curve for Anti-alpha V beta3 Antibody,hFc Tag with the EC ₅₀ of 2.8 ng/mL determined byELISA.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.22 μ m filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/ μ g, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The Integrin alpha V beta 5 protein, specifically the alpha-V (ITGAV) integrin subunit, serves as a versatile receptor for a range of ligands, including vitronectin, cytotactin, fibronectin, fibrinogen, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin, and vWF. Recognizing the sequence R-G-D in various ligands, ITGAV:ITGB3 binds to fractalkine, acting as a coreceptor in CX3CR1-dependent fractalkine signaling. Additionally, it forms essential binding interactions with NRG1, FGF1, FGF2, IGF1, IGF2, IL1B, PLA2G2A, fibrillin-1 (FBN1), and CD40LG, contributing to diverse signaling pathways. Notably, the ITGAV:ITGB3 or ITGAV:ITGB6 complex acts as a receptor for transforming growth factor beta-1 (TGF-beta-1), mediating its release from regulatory Latency-associated peptide (LAP) and playing a crucial role in TGF-beta-1 activation. Furthermore, ITGAV:ITGB5 functions as a receptor for Adenovirus type C during microbial infection. The integrative and multifunctional nature of Integrin alpha V beta 5 underscores its pivotal role in mediating diverse cellular responses and signaling cascades.

Caution: Product has not been fully validated for medical applications. For research use only.

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