

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin α 1/CD49a in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with rhIntegrin α 2, 3, 4, 5, 6, 8, 9, 10, 11, L, M, V, X, α 6x1/ β 4, α D/ β 2, α 7x2/ β 1, α E/ β 7, or α 2b/ β 3 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 639508
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived human Integrin α 1/CD49a Phe29-Pro1141 Accession # P56199
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Integrin α 1 (also VLA-1, CD49a and Laminin and Collagen Receptor) is a 190-210 kDa member of the integrin alpha chain family of molecules. It is found on smooth muscle cells, osteoblasts, adipocytes and intestinal epithelium. Integrin α 1 forms a noncovalent heterodimer with Integrin β 1, and serves as a divalent-cation dependent receptor for collagen types I, IV, VI, XIII and XVI. It also binds the diarrhea-associated NSP4 enterotoxin of rotavirus. Mature human Integrin α 1 is a 1151 amino acid (aa) type I transmembrane glycoprotein that contains a 1113 aa extracellular domain (ECD) and a 15 aa cytoplasmic tail. The ECD contains one vWFA/I-domain (aa 147-360) that binds collagen, plus multiple divalent cation binding sites. Potential splice variants exist that show a two and four aa substitution for aa 765-1179. Over aa 29-1141 (the ECD), human Integrin α 1 shares 88% aa identity with mouse Integrin α 1.

PRODUCT SPECIFIC NOTICES

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