

Anti-alpha-2 integrin inserted-domain [2E10] Standard Size Ab00777-10.6

This is a Fab fragment with a his-tag.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG (scFv) format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human Fab fragment, His-Tagged, Kappa

Clone Number: 2E10

Alternative Name(s) of Target: CD49b; alpha2-beta1 integrin; glycoprotein Ialla; GP Ialla; VLA2; VLA-2; collagen receptor; alpha-2 integrin I-domain; integrin alpha-2; integrin alpha 2

UniProt Accession Number of Target Protein: P17301

Published Application(s): ELISA, FC

Published Species Reactivity: Human

Immunogen: 2E10 was generated by immunizing BALB/c mice with a DNA vaccine containing the human alpha2 I-domain cDNA sequence within pVAC2. The alpha2 I-domain is expressed as a fusion protein with fragment C of tetanus toxoid (FrC-TT). The scFv was then created using a V-gene phage display library derived from RNA from mice splenocytes and isolated following selection on GST-I after 3 rounds of panning.

Specificity: scFv 2E10 can bind to the I (inserted) domain of recombinant alpha2 (GST- and His-), but cannot bind to the native epitope on platelets. This scFv also cross-reacts with and binds to the I-domain of alpha1 integrin. The alpha2 I-domain consists of ~200 amino acids and contains the ligand-binding site. The $\alpha 2\beta 1$ integrin is expressed on platelets, fibroblasts, activated T lymphocytes, endothelial cells and epithelial cells where its function is to act as a collagen and laminin receptor.

Application Notes: 2E10 scFv can be used to detect alpha2 and alpha1 intergin I-domain in ELISA and FC studies.

Antibody First Published in: Hughes et al. Platelet integrin alpha2 I-domain specific antibodies produced via domain specific DNA vaccination combined with variable gene phage display. Thromb Haemost. 2005 Dec;94(6):1318-26. [PMID:16411412](#)

Note on publication: Describes the generation of mice scFvs by phage display and rabbit polyclonal antibodies raised against alpha2 intergin I-domain. The scFv specificity and reactivity was determined by ELISA and FC.

Product Form

Size: 100 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.