

Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody
Catalog # ABV11786**Specification****Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody - Product Information**

Application	IHC, IF, FC, E
Primary Accession	P08648
Reactivity	Human
Host	Recombinant
Clonality	Monoclonal
Isotype	Human IgG4, kappa
Calculated MW	114536

Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody - Additional Information**Gene ID** 3678

Alias Symbol	ITGA5
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Other Names
Fibronectin receptor; CD49 antigen-like family member E; Integrin alpha-F; VLA-5; CD49e

Appearance
Colorless liquid**Formulation**
200 µg affinity purified human antibody in phosphate-buffered saline (PBS) containing 0.02% Proclin 300**Reconstitution & Storage**
-20 °C**Background Descriptions****Precautions**
Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody - Protein Information****Name** ITGA5 ([HGNC:6141](#))**Synonyms** FNRA**Function**
Integrin alpha-5/beta-1 (ITGA5:ITGB1) is a receptor for fibronectin and fibrinogen. It recognizes the sequence R-G-D in its ligands. ITGA5:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct

from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:12807887, PubMed:17158881). ITGA5:ITGB1 acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FN1 (PubMed:33962943). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed:29030430). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed:31331973).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell junction, focal adhesion

Tissue Location

Expressed in placenta (at protein level).

Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody - Images

Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody - Background

The antibody binds specifically to $\alpha 5\beta 1$ integrin, which is part of the superfamily of glycoprotein transmembrane receptors for ligands such as fibronectin, vitronectin, laminins and collagens. The $\alpha 5\beta 1$ integrin receptor plays a key role in cellular processes such as inflammation, cell proliferation, angiogenesis and tumour metastasis. Comprising the variable domain of the original mouse antibody, a chimeric mouse:human IgG4 version of this antibody has been tested in vivo: In cynomolgus monkeys with laser-induced choroidal neovascularization (CNV), in rabbit models and in human volunteers. The antibody reached Phase II clinical trials with PDL Biopharma and Biogen-Idec.