

## Anti-alpha 5 beta 1 Integrin [M200 (Volociximab)] Standard Size Ab00449-1.1

NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar. This chimeric mouse antibody was made using the variable domain sequences of the original Human IgG4 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG1, Kappa

**Clone Number:** M200 (Volociximab)

**Alternative Name(s) of Target:** Fibronectin receptor; CD49 antigen-like family member E; Integrin alpha-F; VLA-5; CD49e.

**UniProt Accession Number of Target Protein:** P08648

**Published Application(s):** Block, ELISA, FC, IF, IHC

**Published Species Reactivity:** Human

**Immunogen:** Heterodimeric  $\alpha 5 \beta 1$  Fc fusion protein

**Specificity:** The antibody binds to human  $\alpha 5 \beta 1$  integrin with a  $K_d$  of 0.367 nM (determined by Biacore), an  $EC_{50}$  of 0.2 nM and an  $IC_{50}$  of 2.3 nM.

**Application Notes:** 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.

**Antibody First Published in:** Ramakrishnan et al. Preclinical evaluation of an anti-alpha5beta1 integrin antibody as a novel anti-angiogenic agent. J Exp Ther Oncol. 2006;5(4):273-86. [PMID:17024968](#)

**Note on publication:** Describes the role of  $\alpha 5 \beta 1$  integrin in the progression of angiogenesis, and the generation of Volociximab, a chimeric monoclonal antibody whose in vitro and in vivo use is evaluated for therapeutic use.

## Product Form

**Size:**

200 µg Purified antibody.

**Purification:** Protein A affinity purified

**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.