

Anti-alpha 5 beta 1 Integrin [M200 (Volociximab)] Standard Size Ab00449-13.0

NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar.

Isotype and Format: Human IgG4, 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.