

Anti-alpha 5 beta 1 Integrin [M200 (Volociximab)] Standard Size Ab00449-23.0

NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar. This chimeric rabbit 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: Rabbit IgG, 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.