

Volociximab

Cat. No.:	HY-P99333
CAS No.:	558480-40-3
Target:	Integrin
Pathway:	Cytoskeleton
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Volociximab (M200) is a chimeric human/murine IgG4 antibody IIA1 targeting integrin $\alpha 5 \beta 1$ ($EC_{50}=0.2$ nM). Integrin $\alpha 5 \beta 1$ is a major fibronectin receptor involved in angiogenesis. Volociximab has antiangiogenic and antitumor activities and inhibits the proliferation of human umbilical vein vascular endothelial cells (HUVECs) ^{[1][2]} .
IC₅₀ & Target	$\alpha 5 \beta 1$ 0.2 nM (EC ₅₀)
In Vitro	Volociximab (20, 40, 80, 160, 320 nM) specifically targets integrin $\alpha 5 \beta 1$ ($K_d=0.367$ nM), but not integrin $\alpha 5 \alpha 5$ or $\beta 1 \beta 1$ ^[1] . Volociximab (0.01-100 nM; 4 d) inhibits the proliferation of human umbilical vein vascular endothelial cells (HUVEC) (IC ₅₀ =0.2-0.5 nM) and (10 μ g/mL; 16 h) induces apoptosis in schizogenic but not senescent Huvecs ^[1] . Volociximab (0.067-67 nM; 6 d) inhibits 0.1 μ g/mL VEGF and/or bFGF induced HUVEC angiogenesis in vitro ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Volociximab (300 μ g/eye; intravitreal injection; once weekly for 4 weeks) has well tolerance and inhibits angiogenesis in laser induced choroidal neovascularization (CNV) of cynomolgus monkey model ^[1] . Volociximab (10 mg/kg; i.v.; twice weekly for 3 weeks) suppresses tumor progress in rabbits VX2 model ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Bhaskar V, et al. Volociximab, a chimeric integrin $\alpha 5 \beta 1$ antibody, inhibits the growth of VX2 tumors in rabbits. Invest New Drugs. 2008 Feb;26(1):7-12.
- [2]. Ramakrishnan V, et al. Preclinical evaluation of an anti- $\alpha 5 \beta 1$ integrin antibody as a novel anti-angiogenic agent. J Exp Ther Oncol. 2006;5(4):273-86.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA