

TECHNICAL DATA SHEET

Purified Rabbit Anti-rat CX₃CR1

Catalog Number: TP501

Lot Number: 030903

Content: Protein A purified rabbit IgG, 200 µg, with 0.1% sodium azide, lyophilized.

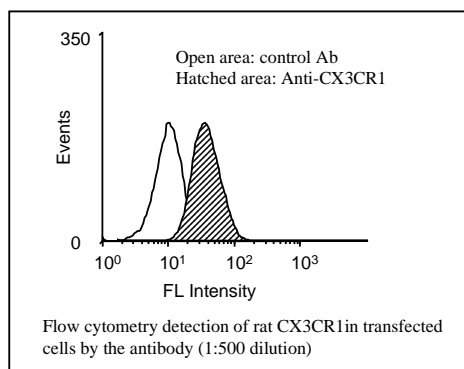
(Reconstitute to 1 mg/ml by adding 200 µl H₂O)

Product Description and Usage: For research use only. This neutralizing polyclonal antibody, which reacts with recombinant and natural rat CX₃CR1, (RBS11) was generated using *E. coli*-expressed rat CX₃CR1 amino terminal domain as an immunogen. The neutralization function was determined in calcium mobilization assays. This antibody has been used for Western blot¹ (1:1,000-1:2,000), Immunohistochemistry^{1,2} (1:100-1:300), Flow Cytometry^{2,3} (1:100-1:300) and neutralizing.^{1,4}

Cross reactivity to CX₃CR1 of other species has not been determined.

Storage Condition: 4°C for short term storage or -20°C in small aliquots for long term storage. Avoid repeated freeze and thaw.

Background: Fractalkine, also termed neurotactin, is a membrane-bound CX₃C chemokine. Rat CX₃CR1, also named RBS11, was first cloned from rat brainstem, pituitary and/or spinal cord cDNA libraries. A G-protein-coupled seven-transmembrane domain receptor, it was recently identified to serve as



fractalkine receptor. The human equivalent receptor is known as V28, which has been shown to mediate both the adhesive and migratory functions of fractalkine. Fractalkine and CX₃CR1 represent new types of leukocyte trafficking regulators.

References:

1. Zhi-Ye Zhuang, et al. Role of the CX₃CR1/p38 MAPK pathway in spinal microglia for the development of neuropathic pain following nerve injury-induced cleavage of fractalkine. *Brain Behav Immun.* 2007 July; 21(5): 642-651.
2. Meucci O, et al. Expression of CX₃CR1 chemokine receptors on neurons and their role in neuronal survival. *Proc Natl Acad Sci U S A* 2000 Jul 5;97(14):8075-80
3. Dan Sunnemark, et al. Differential Expression of the Chemokine Receptors CX₃CR1 and CCR1 by Microglia and Macrophages in Myelin-Oligodendrocyte-Glycoprotein-Induced Experimental Autoimmune Encephalomyelitis. *Brain Pathol* 2003;13:617-629
4. Kengo Furuichi, Ji-Liang Gao, and Philip M. Murphy. Chemokine Receptor CX₃CR1 Regulates Renal Interstitial Fibrosis after Ischemia-Reperfusion Injury. *Am J Pathol.* 2006 August; 169(2): 372-387

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