

TECHNICAL DATA SHEET

Purified Rabbit Anti-rat Fractalkine

Catalog Number: TP203

Lot Number: 100218

Content: Protein A purified rabbit IgG, 500 µg, with 0.1% sodium azide, lyophilized.

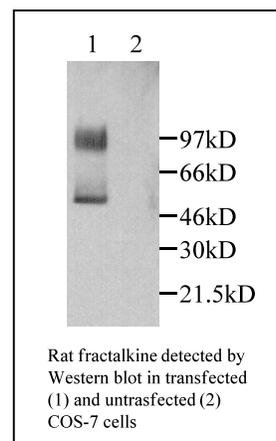
(Reconstitute to 1mg/ml by adding 500 µl H₂O)

Product Description and Usage: For research use only. This neutralizing polyclonal antibody, which reacts with recombinant and natural rat fractalkine, was generated using *E. coli*-expressed chemotactic domain of rat fractalkine as an immunogen. This antibody can be used for Western blot (1:1,000-1:2,000)^{1,2} and Immunohistochemistry (1:100-1:500)^{3,4}

Less than 20 % cross-reactivity to human Fractalkine. Cross-reactivity to fractalkine 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. The mature protein is part of a 397-amino acid precursor consisting of a chemokine domain (76 amino acids), a mucin stalk of 241 residues, a putative transmembrane domain (18 amino acids), and an intracellular tail of 37 amino acids. Within the chemokine



domain the first two cysteine residues are separated by 3 amino acids. Fractalkine message is found at high concentrations in the brain, and also in kidney, lung and heart. Fractalkine is chemotactic for monocytes and may play a role in brain inflammation.

References:

1. Sang-Ok Moon, et al., Resveratrol Suppresses Tumor Necrosis Factor- α -Induced Fractalkine Expression in Endothelial Cells. *Mol Pharmacol* 70:112-119, 2006
2. Bysani Chandrasekar, et al., Fractalkine (CX₃CL1) stimulated by nuclear factor κ B (NF- κ B)-dependent inflammatory signals induces aortic smooth muscle cell proliferation through an autocrine pathway. *Biochem. J.* 2003, 373: 547-558
3. Lisa A. Robinson, et al. A Role for Fractalkine and Its Receptor (CX₃CR1) in Cardiac Allograft Rejection. *The Journal of Immunology*, 2000, 165: 6067-6072
4. Christopher A. Haskell, et al. Targeted deletion of CX₃CR1 reveals a role for fractalkine in cardiac allograft rejection. *J Clin Invest.* 2001 September 1; 108 (5): 679-688