



fractalkine (h): 293T Lysate: sc-159638

BACKGROUND

Chemokines are members of a superfamily of inducible, secreted, pro-inflammatory cytokines. Members of the chemokine family exhibit 20 to 50% homology in their predicted amino acid sequences and are divided into four subfamilies. In the subfamily designated C-C or β , the first two cysteines are adjacent. In the C-X-C or α subfamily, the first two of four cysteine residues are separated by a single amino acid. C subfamily members, also designated γ chemokines, lack the first and third cysteine residues of the conserved motif. Chemokines in these three subfamilies are small, secreted proteins. Fractalkine, also designated neurotactin, is the first characterized member of a fourth chemokine subfamily. Fractalkine contains a novel C-X₃-C motif in which the first two cysteines are separated by three amino acid residues. Fractalkine mRNA has been detected in brain and heart and is upregulated in microglia and endothelial cells by inflammatory signals. The protein exists both as a membrane-bound form and as a chemotactic soluble form.

REFERENCES

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2. Miller, M.D., et al. 1992. Biology and biochemistry of the chemokines: a family of chemotactic and inflammatory cytokines. *Crit. Rev. Immunol.* 12: 17-46.
3. Taub, D.D., et al. 1993. Review of the chemokine meeting of the third international symposium of chemotactic cytokines. *Cytokine* 5: 175-179.
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5. Taub, D.D., et al. 1996. β chemokines costimulate lymphocyte cytolysis, proliferation, and lymphokine production. *J. Leuk. Biol.* 59: 53-60.
6. Bazan, J.F., et al. 1997. A new class of membrane-bound chemokine with a CX₃C motif. *Nature* 385: 640-644.
7. Pan, Y., et al. 1997. Neurotactin, a membrane-anchored chemokine upregulated in brain inflammation. *Nature* 387: 611-616.

CHROMOSOMAL LOCATION

Genetic locus: CX3CL1 (human) mapping to 16q21.

PRODUCT

fractalkine (h): 293T Lysate represents a lysate of human fractalkine transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

fractalkine (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive fractalkine antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.