Purified Rabbit Anti-rat SDF-1β

Catalog Number: TP202

Lot Number: 102903

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

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

Product Description and Usage: For research use only. This polyclonal antibody, which reacts with both mouse and rat SDF- 1β , was generated using *E. coli*-expressed mouse SDF- 1β as an immunogen. This antibody has been tested for Western Blot (1:1,000), immunoprecipitation (1:50)⁻¹, Flow Cytometry (1:100)⁻¹ and immunohistochemistry, (1:100).^{1,2}

Cross-reactivity to SDF-1 β 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: SDF-1 β (stromal cell-derived factor- β), also known as pre-B-cell growthstimulating factor (PBSF), is a 74-amino acid CXC chemokine originally cloned from a bone marrow stromal cell line. Targeted deletion of SDF-1 gene resulted in defects of B-cell lymphopoiesis and bone marrow myelopoiesis in mice. SDF-1 has been shown to be chemotactic for lymphocytes. In addition, SDF-1 was recently reported to be a ligand for CXCR4 (LESTR/fusin), a co-21.5kD -14.3kD Detection of rat recombinant SDF-1β in transfected cells by Western blot

receptor for HIV-1 entry into T cells. SDF-1 binding to CXCR4 inhibits HIV-1 entry.

References:

- 1. K. Reissa, et al. Stromal cell-derived factor 1 is secreted by meningeal cells and acts as chemotactic factor on neuronal stem cells of the cerebellar external granular layer. *Neuroscience* 15 November 2002, 115(1): 295-305
- Renata Sano, et al. Chemokine-induced recruitment of genetically modified bone marrow cells into the CNS of GM1gangliosidosis mice corrects neuronal pathology. *Blood*, 1 October 2005, Vol. 106(7): 2259-22682. Nagasawa, T et al. (1994) Molecular cloning and structure of a pre-B-cell growth-stimulating factor. Proc. Natl. Acad. Sci. USA 91:2305-2309.

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