

TECHNICAL DATA SHEET

Purified Rabbit Anti-mouse SDF-1 α

Catalog Number: TP201

Lot Number: 010718

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

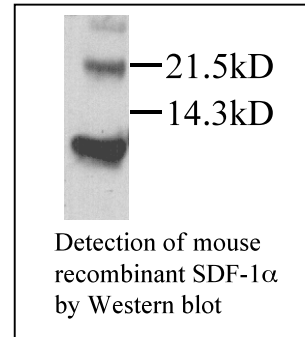
(Reconstitute to 1 mg/ml by adding 200 μ l H₂O)

Product Description and Usage: For research use only. This polyclonal antibody, which reacts with both mouse and rat SDF-1 α , was generated using *E. coli*-expressed mouse SDF-1 α as an immunogen. This antibody can be used for Western blot (1:1,000)¹ and immunohistochemistry (1:100-500).^{2,3}

Cross-reactivity to SDF-1 α 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 α (stromal cell-derived factor- α), also known as pre-B-cell growth-stimulating factor (PBSF), is a 70-amino acid CXC chemokine originally cloned from a bone marrow stromal cell line¹. Targeted deletion of SDF-1 gene resulted in defects of B-cell lymphopoiesis and bone marrow myelopoiesis. 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-receptor for HIV-1 entry into T cells. SDF-1 binding to CXCR4 inhibits HIV-1 entry.



References:

1. Yongquan Luo, et al, Functional SDF1 α /CXCR4 signaling in the developing spinal cord. *Journal of Neurochemistry*. April 2005, 93(2): 452.
2. Eric R. Fedyk, et al. Expression of Stromal-Derived Factor-1 Is Decreased by IL-1 and TNF and in Dermal Wound Healing. *The Journal of Immunology*, 2001, 166: 5749-5754.
3. Jennifer M. Smith, et al. CXCL12 activation of CXCR4 regulates mucosal host defense through stimulation of epithelial cell migration and promotion of intestinal barrier integrity. *Am J Physiol Gastrointest Liver Physiol* 288: G316-G326, 2005

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