

SCF Antibody

SCF: Stem cell factor, Mast cell growth factor, MGF, c-kit ligand, KL-1, KITLG, SHEP7

CATALOG No.: 5165

Background:

Stem cell factor (SCF) is the ligand of the c-Kit oncogene and is expressed by various structural and inflammatory cells in the airways (reviewed in 1). Binding of SCF by the c-Kit receptor leads to homodimerization of the receptor and the activation of signalling pathways such as PI-3, PLC- γ , Jak/STAT, and MAP kinase pathways (1). SCF expression leads to the induction of mast cell survival and the expression and release of histamine, pro-inflammatory cytokines and chemokines (2). The inhibition of the SCF/c-Kit pathway leads to a decrease in histamine levels, mast cell and eosinophil infiltration, IL-4 production and airway hyperresponsiveness, suggesting this pathway may be a useful therapeutic target in inflammatory diseases such as asthma (3). At least two isoforms of SCF are known to exist.

SOURCE:

Rabbit polyclonal SCF antibody was raised against an 18 amino acid peptide from near the center of human SCF (GenBank accession no. P21583).

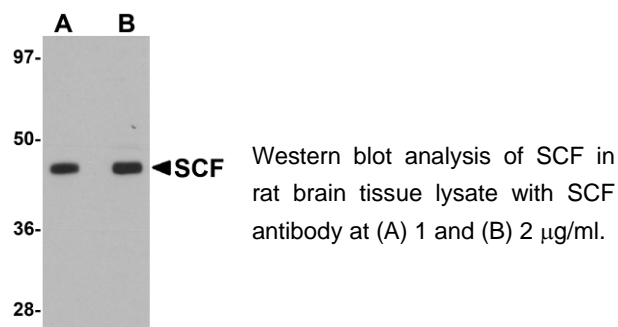
APPLICATION:

SCF antibody can be used for detection of SCF by Western blot at 1 - 2 μ g/ml. (Optimal dilution should be determined by user.) Rat brain tissue lysate can be used as positive control. SCF antibody is human, mouse and rat reactive.

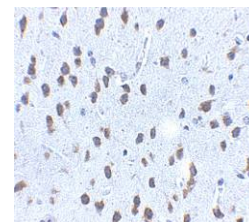
For research use only.

STORAGE:

SCF antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Immunohistochemistry of SCF in mouse brain tissue with SCF antibody at 2.5 μ g/ml.



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **5165P**.
Rat Brain Tissue Lysate, Catalog No. **1463**.

REFERENCES:

1. Reber L, Da Silva CA, and Frossard N. Stem cell factor and its receptor c-Kit as targets for inflammatory diseases. *Euro. J. Pharmacology* 2006; 533:327-40.
2. Jensen BM, Metcalfe DD, and Gilfillan AM. Targeting kit activation: a potential therapeutic approach in the treatment of allergic inflammation. *Inflamm. Allergy Drug Targets* 2007; 6:57-62.
3. Lukacs NW, Strieter RM, Lincoln PM, et al. Stem cell factor (c-kit ligand) influences eosinophil recruitment and histamine levels in allergic airway inflammation. *J. Immunol.* 1996; 156:3945-51.
(09-01D)