Feline SCF/c-kit Ligand Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2268

DESCRIPTION

Species Reactivity	Feline
Specificity	Detects feline SCF/c-kit Ligand in Western blots. In Western blots, approximately 60% cross-reactivity with recombinant mouse SCF is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant feline SCF/c-kit Ligand Lys26-Ala190 Accession # P79169
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

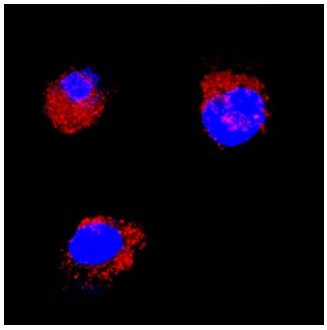
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Feline SCF/c-kit Ligand (Catalog # 2268-SC)
Immunocytochemistry	10-20 µg/mL	See Below

DATA

Immunocytochemistry



SCF/c-kit Ligand in Feline PBMCs. SCF/c-kit Ligand was detected in immersion fixed feline peripheral blood mononuclear cells (PBMCs) using Goat Anti-Feline SCF/c-kit Ligand Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2268) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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BACKGROUND

Feline SCF (stem cell factor; also known as c-kit ligand) is a type I transmembrane (TM) glycoprotein that plays an important role in a number of fetal and adult developmental processes (1-4). It is synthesized as a 274 amino acid (aa) precursor that contains a 25 aa signal sequence, a 190 aa extracellular region, a 23 aa TM segment and a 36 aa cytoplasmic tail (5). Within the extracellular region there are two intrachain disulfide bonds and four α-helices. Although the predicted molecular weight is 19 kDa, the native molecule is anywhere from 28-40 kDa in size and reflects both N- and O-linked glycosylation (1). Glycosylation is not necessary for bioactivity (6). The transmembrane form of SCF can be cleaved proteolytically, generating a 165 aa soluble form. Circulating SCF exists as both a monomer and nondisulfide-linked homodimer, with monomer predominating (50% to 75%) (6). Both the soluble and TM forms have bioactivity. Their principal targets may be different, however (7). A second, alternate splice short form of feline SCF has been identified (5). It too, is membrane bound and contains 246 aa residues. It will not give rise to a soluble form, since alternate splicing removes the proteolytic cleavage site used in the long form. The ratio of long form to short form varies tissue to tissue (1). Soluble feline SCF shares 93%, 93%, 90%, 87%, and 78% aa sequence identity with porcine, canine, bovine, human and mouse SCF, respectively. Cells known to express SCF include endothelial cells, fibroblasts and keratinocytes (1).

References:

1. Broudy, V.C. (1997) Blood **90**:1345.
2. Nakagawa, S. and T. Kitoh (2000) Curr. Opin. Hematol. **7**:133.
3. Yoshida, H. *et al.* (2001) J. Invest. Dermatol. Symp. Proc. **6**:1.
4. Kang, J. and S.D. Der (2004) Curr. Opin. Immunol. **16**:180.
5. Dunham, S.P. and D.E. Onions (1996) DNA Seq. **6**:233.
6. Hsu, Y-R. *et al.* (1997) J. Biol. Chem. **272**:6406.
7. Kapur, R. *et al.* (1998) Blood **91**:879.

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