Feline SCF/c-kit Ligand Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2268V
100 µg

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
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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).

PRODUCT SPECIFIC NOTICES

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