Datasheet for 600-401-EE1

SCF Antibody

Overview

Description:	Anti-SCF (RABBIT) Antibody - 600-401-EE1
Item No.:	600-401-EE1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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. Binding of SCF by the c-Kit receptor leads to homodimerization of the receptor and the activation of signaling pathways such as PI-3, PLC-gamma, Jak/STAT, and MAP kinase pathways. SCF expression leads to the induction of mast cell survival and the expression and release of histamine, pro-inflammatory cytokines and chemokines. 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. At least two isoforms of SCF are known to exist.
Synonyms:	SCF Antibody, SF, MGF, SCF, FPH2, KL-1, Kitl, SHEP7, Kit ligand, Mast cell growth factor
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KITLG
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-SCF antibody was prepared from whole rabbit serum produced by repeated immunizations with an 18 amino acid synthetic peptide from near the internal region of human SCF.

Purity/Specificity:	Anti-SCF Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with SCF from other sources has not been determined.
Relevant Links:	• UniProtKB - P21583 • GeneID - 4254 • NCBI - P21583

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-SCF Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 31 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

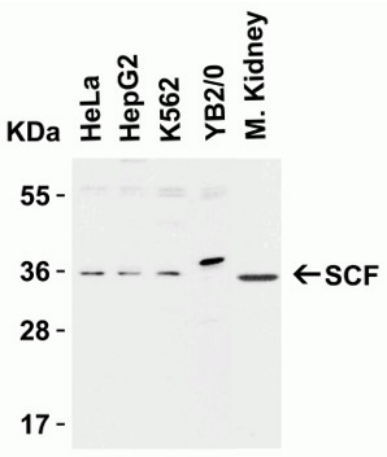
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

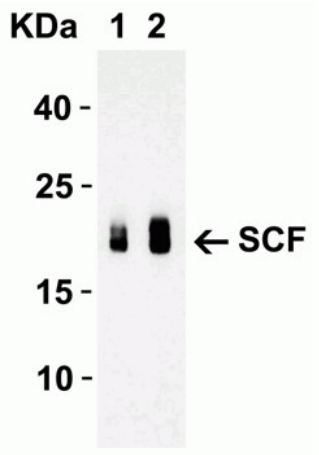
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

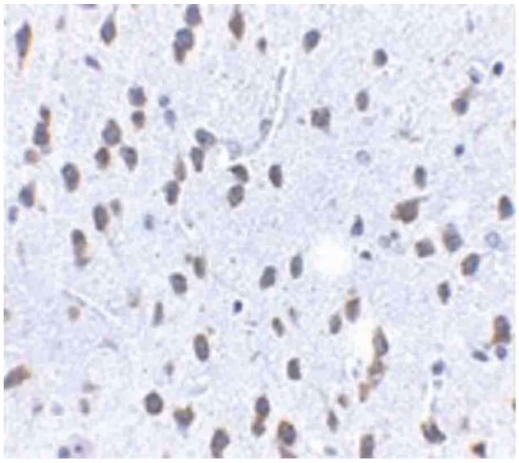
Images



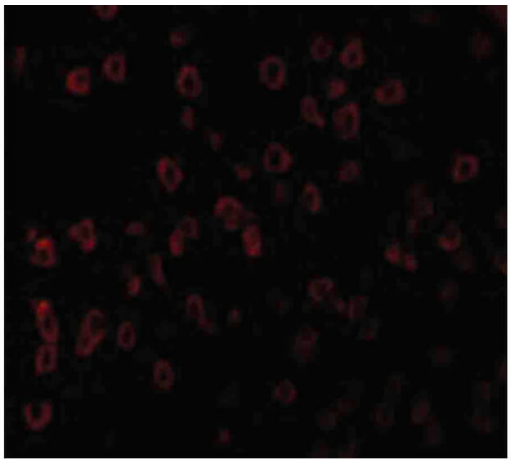
Western Blot
Western Blot Validation using SCF. Loading: 15 µg of Human, Mouse and Rat cell and tissue lysates per lane. Antibodies: SCF (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



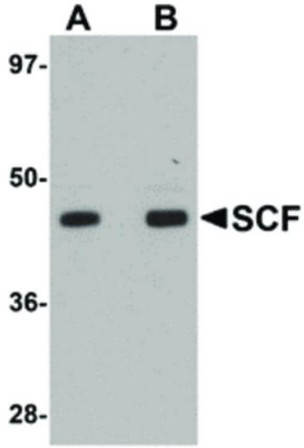
Western Blot
Western Blot Validation using SCF. Loading: 30 ng of human SCF recombinant protein per lane. Antibodies: SCF (Lane 1: 1 µg/mL and Lane 2: 2 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. Observed at around 20kD.



Immunohistochemistry
Immunohistochemistry of SCF antibody. Tissue: mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: SCF antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SCF is a membrane protein. Staining: SCF as precipitated light blue signal with brown nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of SCF antibody. Tissue: Human brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: SCF antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SCF is a membrane protein. Staining: SCF as red fluorescent signal.



Western Blot
Western Blot of SCF antibody. Lane 1: Rat brain tissue lysate with SCF antibody at 1 µg/mL. Lane 2: Rat brain tissue lysate with SCF antibody at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 31 kDa, 40 kDa for SCF. Other band(s): SCF splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.