

c-Kit (H-10): sc-393910

BACKGROUND

The c-Kit proto-oncogene is a member of the receptor tyrosine kinase family and, more specifically, is closely related to the platelet derived growth factor receptor (PDGFR). c-Kit, the normal cellular homolog of the HZ4-feline sarcoma virus transforming gene (v-Kit), encodes a transmembrane receptor. c-Kit regulates a variety of biological responses including chemotaxis, cell proliferation, apoptosis and adhesion. c-Kit is also identical with the product of the W locus in mice and, as such, is integral to the development of mast cells and hematopoiesis. The ligand for the c-Kit receptor (KL) has been identified and is encoded at the murine steel (Sl) locus. Kit is the human homolog of the proto-oncogene c-Kit. Mutations in Kit are integral for tumor growth and progression in various cancers.

CHROMOSOMAL LOCATION

Genetic locus: KIT (human) mapping to 4q12.

SOURCE

c-Kit (H-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 953-976 at the C-terminus of c-Kit of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

c-Kit (H-10) is available conjugated to agarose (sc-393910 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393910 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393910 PE), fluorescein (sc-393910 FITC), Alexa Fluor® 488 (sc-393910 AF488), Alexa Fluor® 546 (sc-393910 AF546), Alexa Fluor® 594 (sc-393910 AF594) or Alexa Fluor® 647 (sc-393910 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393910 AF680) or Alexa Fluor® 790 (sc-393910 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393910 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

c-Kit (H-10) is recommended for detection of c-Kit p145 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for c-Kit siRNA (h): sc-29225, c-Kit shRNA Plasmid (h): sc-29225-SH, and c-Kit shRNA (h) Lentiviral Particles: sc-29225-V.

Molecular Weight of c-Kit precursor: 120 kDa.

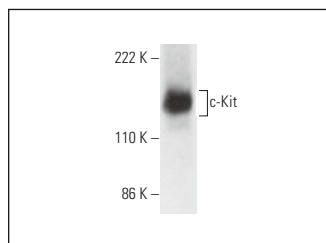
Molecular Weight of mature c-Kit: 145 kDa.

Positive Controls: CCRF-HSB-2 cell lysate: sc-2265.

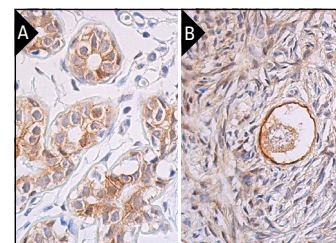
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



c-Kit (H-10): sc-393910. Western blot analysis of c-Kit expression in CCRF-HSB-2 whole cell lysate.



c-Kit (H-10): sc-393910. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing membrane and cytoplasmic staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing membrane and cytoplasmic staining of follicle cells and cytoplasmic staining of ovarian stroma cells (B).

SELECT PRODUCT CITATIONS

1. Sun, K.K., et al. 2016. Atypical presentation of a gastric stromal tumor masquerading as a giant intraabdominal cyst: a case report. *Oncol. Lett.* 12: 3018-3020.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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