

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.

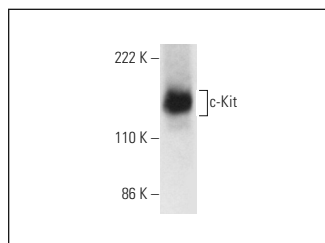
Molecular Weight of mature c-Kit: 145 kDa.

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

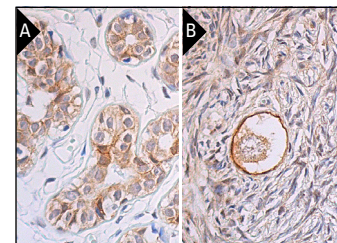
RECOMMENDED SUPPORT REAGENTS

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

- 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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