SANTA CRUZ BIOTECHNOLOGY, INC.

c-Kit (3H1825): sc-70455

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: Kit (mouse) mapping to 5 C3.3.

SOURCE

c-Kit (3H1825) is a rat monoclonal antibody raised against IL-3-dependent mast cells derived from normal bone marrow.

PRODUCT

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

c-Kit (3H1825) is available conjugated to either phycoerythrin (sc-70455 PE) or fluorescein (sc-70455 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

c-Kit (3H1825) is recommended for detection of c-Kit of mouse origin by flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for c-Kit siRNA (m): sc-29852, c-Kit shRNA Plasmid (m): sc-29852-SH and c-Kit shRNA (m) Lentiviral Particles: sc-29852-V.

Molecular Weight of c-Kit precursor: 120 kDa.

Molecular Weight of mature c-Kit: 145 kDa.

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.

CONJUGATES

See **c-Kit (E-3): sc-365504** for c-Kit antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.