**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 H24-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 (SI) 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.

**APPLICATIONS**

c-Kit (E-3) is recommended for detection of c-Kit p145 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) 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 siRNA (m): sc-29852, c-Kit siRNA (r): sc-63363, c-Kit shRNA Plasmid (h): sc-29225-SH, c-Kit shRNA Plasmid (m): sc-29852-SH, c-Kit shRNA Plasmid (r): sc-63363-SH, c-Kit shRNA (h) Lentiviral Particles: sc-29225-V, c-Kit shRNA (m) Lentiviral Particles: sc-29852-V and c-Kit shRNA (r) Lentiviral Particles: sc-63363-V.

Molecular Weight of c-Kit precursor: 120 kDa.

Molecular Weight of mature c-Kit: 145 kDa.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: KIT (human) mapping to 4q12; Kit (mouse) mapping to 5 C3.3.

**SOURCE**

c-Kit (E-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 951-981 within the C-terminus of c-Kit of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ, kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

c-Kit (E-3) is available conjugated to agarose (sc-365504 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365504 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-365504 PE), fluorescein (sc-365504 FITC), Alexa Fluor® 488 (sc-365504 AF488) or Alexa Fluor® 647 (sc-365504 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-365504 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

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

**SELECT PRODUCT CITATIONS**


**APPLICATIONS**

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Molecular Weight of mature c-Kit: 145 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, TF-1 cell lysate: sc-2412 or TT whole cell lysate: sc-364195.

**DATA**

c-Kit (E-3): sc-365504. Western blot analysis of c-Kit expression in TT whole cell lysate.


**RESEARCH USE**

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