Anti-c-Kit Antibody [ST04-99]

ET1609-60

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 110 kDa
Clone number:	ST04-99

Description: 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 (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.

Immunogen: Synthetic peptide within C-terminal human KIT.

Positive control: Human brain tissue lysates, Saos-2 cell lysate, human breast tissue, human gastrointestinal stromal tumor tissue.

Subcellular location: Cell membrane, Cytoplasm.

Database links: SwissProt: P10721 Human | P05532 Mouse

Recommended Dilutions:

WB	1:2,000
IHC-P	1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

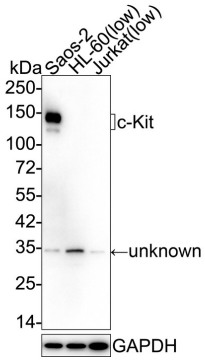

Fig1: Western blot analysis of c-Kit on different lysates with Rabbit anti-c-Kit antibody (ET1609-60) at 1/2,000 dilution.

Lane 1: Saos-2 cell lysate
Lane 2: HL-60 cell lysate (low expression)
Lane 3: Jurkat cell lysate (low expression)

Lysates/proteins at 15 µg/Lane.

Predicted band size: 110 kDa
Observed band size: 110-140 kDa

Exposure time: 2 minutes 18 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1609-60) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

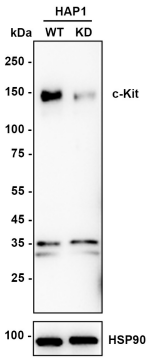

Fig2: Western blot analysis of c-Kit on different lysates with Rabbit anti-c-Kit antibody (ET1609-60) at 1/5,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-c-Kit KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 110 kDa
Observed band size: 140 kDa

Exposure time: 2 minute 40 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1609-60) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

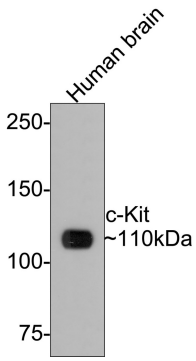

Fig3: Western blot analysis of c-Kit on human brain tissue lysates with Rabbit anti-c-Kit antibody (ET1609-60) at 1/500 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 110 kDa
Observed band size: 110 kDa

Exposure time: 2 minutes;

6% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1609-60) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

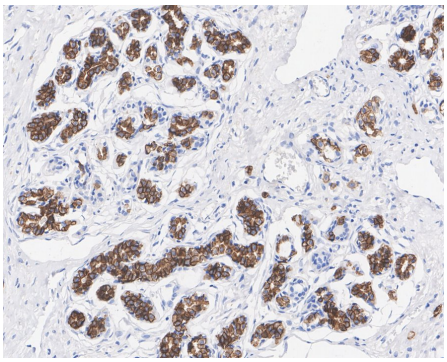

Fig4: Immunohistochemical analysis of paraffin-embedded human breast tissue with Rabbit anti-c-Kit antibody (ET1609-60) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1609-60) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

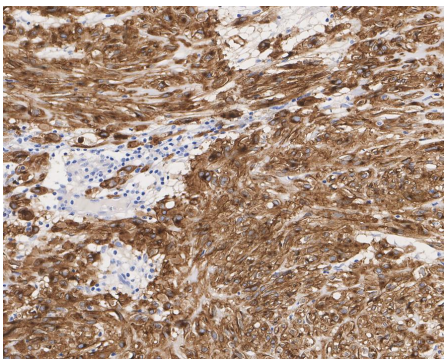

Fig5: Immunohistochemical analysis of paraffin-embedded human gastrointestinal stromal tumor tissue with Rabbit anti-c-Kit antibody (ET1609-60) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1609-60) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Chi C et al. In vitro morphology, viability and cytokine secretion of uterine telocyte-activated mouse peritoneal macrophages. J Cell Mol Med 19:2741-50 (2015).
2. Drummond CA et al. Reduction of Na/K-ATPase affects cardiac remodeling and increases c-kit cell abundance in partial nephrectomized mice. Am J Physiol Heart Circ Physiol 306:H1631-43 (2014).