Data Sheet (Cat.No.TMAH-00669)

TargetMol

Anti-CD117 Antibody (9H202)

Product Details

Ig Type:	hIgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	9H202
Purification:	Affinity-chromatography

Applications

Verified Activity:	1. IHC image of TMAH-00669 diluted at 1：100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-human polymer IgG labeled by HRP and visualized using 0.05% DAB. 2. Overlay Peak curve showing JK cells stained with TMAH-00669 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10^6 cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-human IgG (H+L) at 1:200 dilution for 35min at 4°C.Control antibody (green line) was human IgG (1ug/1*10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.
Application:	ELISA, IHC, FCM
Recommended	IHC:1:50-1:200; FCM:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human KIT Protein
Antigen Species:	Human
Gene ID:	3815
Uniprot ID:	P10721
Synonyms:	SCFR;ckit;CD117;PBT;EC 2.7.10.1;EC 2.7.10;c-kit;KIT
Biology Area:	Neuroscience, Cancer, Developmental biology, Tags & Cell Markers, Immunology, Signal transduction, Stem cells

Research Background

Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell

development, migration and function, and in melanogenesis. In response to KITLG/SCF binding, KIT can activate several signaling pathways. Phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KIT signaling is modulated by protein phosphatases, and by rapid internalization and degradation of the receptor. Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B. Promotes phosphorylation of PIK3R1, CBL, CRK (isoform Crk-II), LYN, MAPK1/ERK2 and/or MAPK3/ERK1, PLCG1, SRC and SHC1.

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