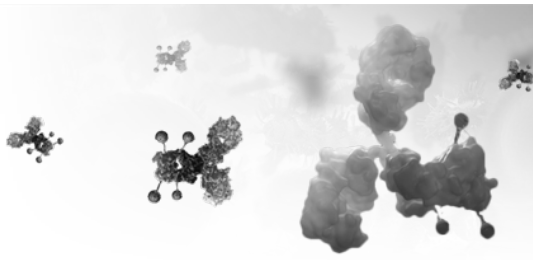

Anti-KIT monoclonal antibody, clone 215E3 (DCABH-320)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Mouse monoclonal to c-Kit
Antigen Description	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.
Specificity	This antibody detects the extracellular part of c-Kit.
Immunogen	MOLM-1 megakaryocytic cells
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Cow, Human, Primates
Clone	215E3

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

Purification	Purity >95% (by SDS-PAGE). Purified from hybridoma culture supernatant by protein-A affinity chromatography.
Conjugate	Unconjugated
Applications	IP, IHC-Fr, ICC, Flow Cyt
Format	Liquid
Size	100 µg
Buffer	pH: 7.40; Preservative: 0.1% Sodium azide; Constituent: PBS
Preservative	0.1% Sodium Azide
Storage	Store at 4°C or at -20°C for long term storage.

GENE INFORMATION

Gene Name	KIT v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog [Homo sapiens]
Official Symbol	KIT
Synonyms	KIT; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; PBT, piebald trait; mast/stem cell growth factor receptor Kit; C Kit; CD117; SCFR; p145 c-kit; proto-oncogene c-Kit; piebald trait protein; soluble KIT variant 1; tyrosine-protein kinase
Entrez Gene ID	3815
Protein Refseq	NP_000213
UniProt ID	A0A024RDA0
Chromosome Location	4q11-q12
Pathway	Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem; C-MYB transcription factor network, organism-specific biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Endocytosis, organism-specific biosystem; Endocytosis, conserved biosystem;
Function	ATP binding; cytokine binding; metal ion binding; nucleotide binding; protease binding; protein binding; protein homodimerization activity; protein tyrosine kinase activity; receptor activity; receptor signaling protein tyrosine kinase activity; stem cell

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