Datasheet for ABIN5510737

KIT ELISA Kit

1 Image

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Overview

Quantity:	96 tests
Target:	KIT
Binding Specificity:	AA 25-527
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CD117/c-kit
Brand:	PicoKine™
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Expression system for standard: NSO, Immunogen sequence: S25-P527
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Characteristics:	Tissue Specificity: Isoform 1 and isoform 2 are detected in bone marrow cells, spermatogonia and spermatocytes, but not in round spermatids, elongating spermatids and spermatozoa. Isoform 3 is detected in round spermatids, elongating spermatids and spermatozoa, but not in spermatogonia and spermatocytes (at protein level). Isoform 1 is widely expressed and detected in fetal liver and bone marrow. Isoform 3 is detected in bone marrow cells enriched in hematopoietic stem cells. .

Target Details

Target:	KIT
Alternative Name:	Kit (KIT Products)
Background:	Protein Function: 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. . Background: SCFR(Mast/stem cell growth factor receptor), also known as proto-oncogene c-Kit or tyrosine-protein kinase Kit or CD117, is a protein that in humans is encoded by the KIT gene. KIT was first described as the cellular homolog of the feline sarcoma viral oncogene v-kit. The KIT gene is mapped on 4q12. Kit was expressed on the surface of germ cells up to the pachytene stage. Signaling from the KIT receptor tyrosine kinase is essential for primordial germ cell growth both in vivo and in vitro. Determination of the KIT effectors acting in primordial germ cells has been hampered by the lack of effective methods to manipulate easily gene expression in these cells. Synonyms: Mast/stem cell growth factor receptor Kit,SCFR,2.7.10.1,Proto-oncogene c-Kit,Tyrosine-protein kinase Kit,CD117,Kit,Sl, Full Gene Name: Mast/stem cell growth factor receptor Kit Cellular Localisation: Isoform 1: Cell membrane, Single-pass type I membrane protein.
UniProt:	P05532
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Sensory Perception of Sound, Stem Cell Maintenance, Production of Molecular Mediator of Immune Response, Regulation of long-term Neuronal Synaptic Plasticity

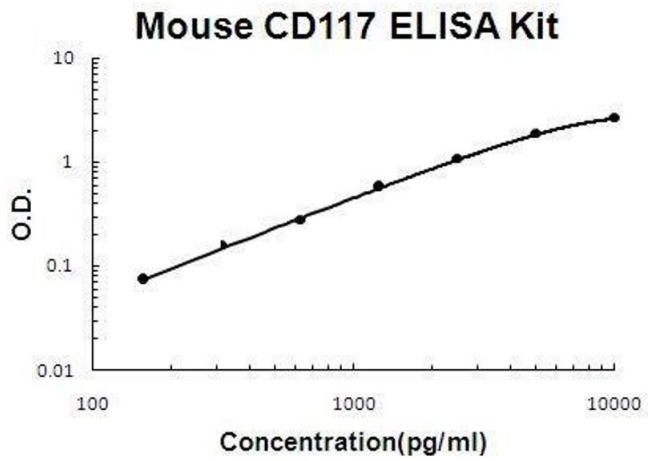
Application Details

Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.)
Expiry Date:	12 months

Images



ELISA

Image 1. Mouse CD117/c-kit PicoKine ELISA Kit standard curve