Datasheet for ABIN671721

anti-KIT antibody (AA 901-976)

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Overview

Quantity:	100 µL
Target:	KIT
Binding Specificity:	AA 901-976
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KIT antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunocytochemistry (ICC)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human CD117/c-kit
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Dog,Cow,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	KIT

Target Details

Alternative Name:	c-Kit (KIT Products)
Background:	Synonyms: PBT, SCFR, C-Kit, CD117, Mast/stem cell growth factor receptor Kit, Piebald trait protein, Proto-oncogene c-Kit, Tyrosine-protein kinase Kit, p145 c-kit, v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog, KIT 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.
Gene ID:	3815
UniProt:	P10721
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

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Application Details

	ICC 1:100-500
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:

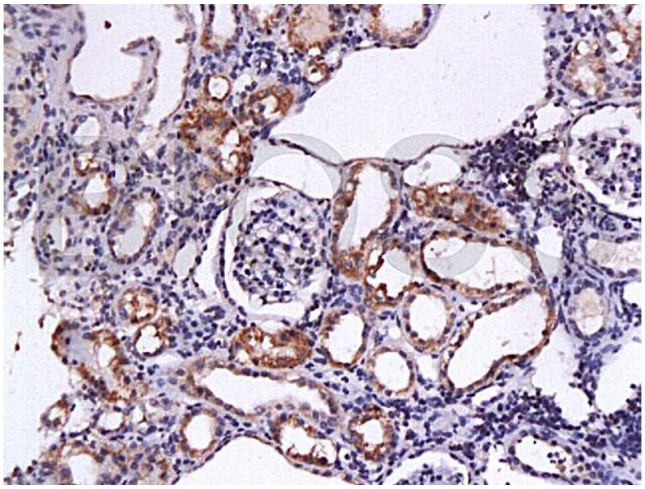
Yin, Liang, Wang, Yan, Yin, Wu, Su: "Naringenin induces laxative effects by upregulating the expression levels of c-Kit and SCF, as well as those of aquaporin 3 in mice with loperamide-induced constipation." in: **International journal of molecular medicine**, Vol. 41, Issue 2, pp. 649-658, (2018) (PubMed).

Lin, Tang, Cai, Wang, Li, Sui, Guo: "NPs/NPRs Signaling Pathways May Be Involved in Depression-Induced Loss of Gastric ICC by Decreasing the Production of mSCF." in: **PLoS ONE**, Vol. 11, Issue 2, pp. e0149031, (2016) (PubMed).

Lu, Luo, Sun, Qin, Li: "Electroacupuncture improves behavioral recovery and increases SCF/c-kit expression in a rat model of focal cerebral ischemia/reperfusion." in: **Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology**, Vol. 34, Issue 4, pp. 487-95, (2013) (PubMed).

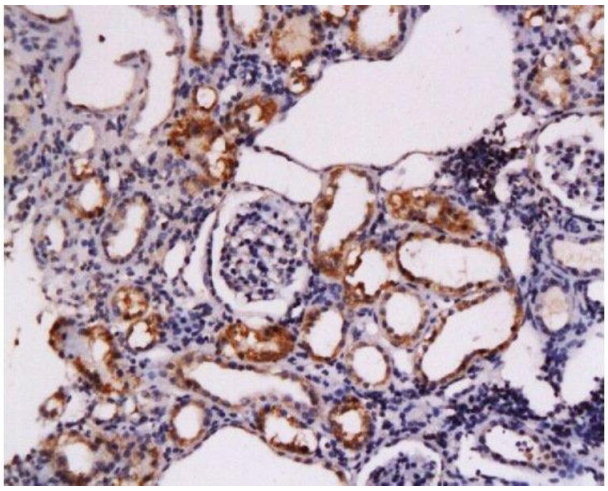
Zhang, Huang, Wu, Yang, Song, Chen, Fan, Wang: "Cardiac stem cells differentiate into sinus node-like cells." in: **The Tohoku journal of experimental medicine**, Vol. 222, Issue 2, pp. 113-20, (2010) (PubMed).

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat kidney tissue labeled Anti-CD117/c-kit/SCFR Polyclonal Antibody, Unconjugated (ABIN671721) at 1:200, followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded rat kidney tissue labeled Anti-CD117/c-kit/SCFR Polyclonal Antibody, Unconjugated at 1:200, followed by conjugation to the secondary antibody and DAB staining