Datasheet for ABIN743393

anti-KIT antibody (pTyr721)

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Overview

Quantity:	100 µL
Target:	KIT
Binding Specificity:	pTyr721
Reactivity:	Human, Mouse, Rat, Dog
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KIT antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), 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))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human c-Kit around the phosphorylation site of Tyr721
Isotype:	IgG
Specificity:	This phosphorylation site is homologous to that of Tyr723 in Mouse and Tyr722 in Rat.
Cross-Reactivity:	Dog, Human, Mouse, Rat
Predicted Reactivity:	Cow,Pig,Horse
Purification:	Purified by Protein A.

Target Details

Target:	KIT
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

Application Details

	IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

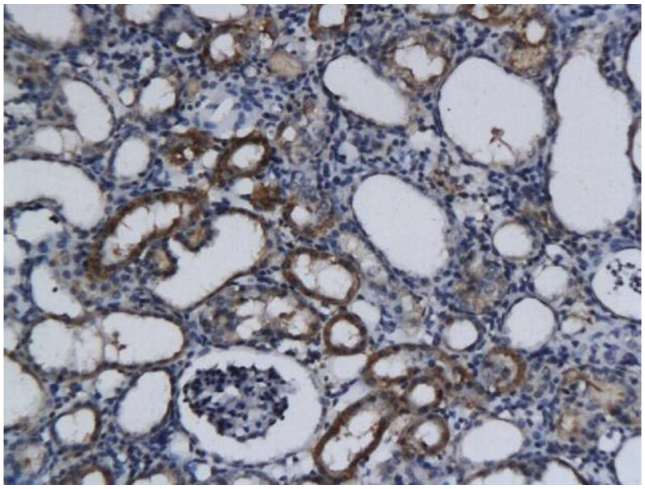
Handling

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

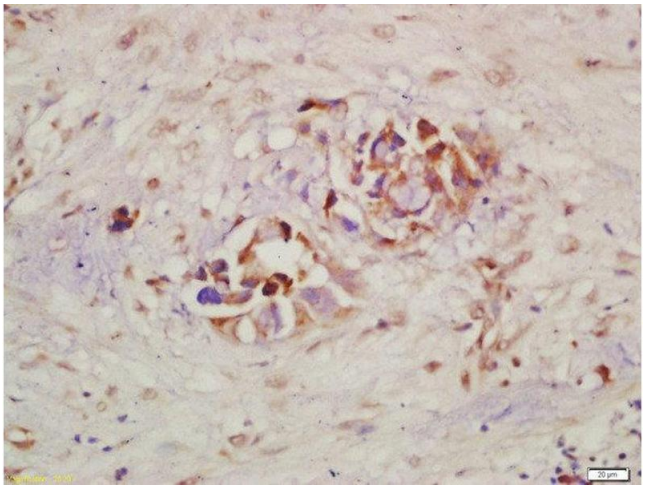
Product cited in:	Halsey, Thamm, Weishaar, Burton, Charles, Gustafson, Avery, Ehrhart: "Expression of Phosphorylated KIT in Canine Mast Cell Tumor." in: **Veterinary pathology**, Vol. 54, Issue 3, pp. 387-394, (2017) (PubMed).

Images



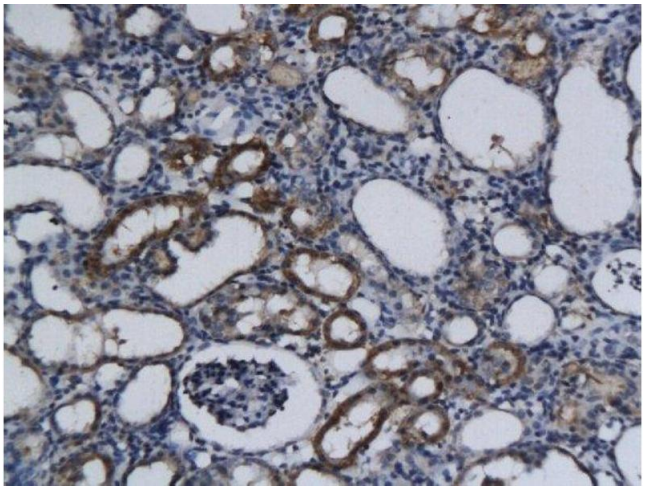
Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat kidney tissue labeled with Anti-Phospho-c-Kit(Tyr721) Polyclonal Antibody, Unconjugated (ABIN743393) followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Rabbit Anti-c-Kit(Tyr721) Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin embedded rat kidney tissue labeled with Anti-Phospho-c-Kit(Tyr721) Polyclonal Antibody, Unconjugated followed by conjugation to the secondary antibody and DAB staining