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SAV1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56622

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9H4B6
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44634
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SAV1
Epitope Specificity	1-100/383
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus. Cytoplasm.
SIMILARITY	Contains 1 SARAH domain. Contains 2 WW domains.
Post-translational modifications	Phosphorylated by STK3 and STK4. Phosphorylation is not required for SAV1 stability and may increase the number of protein binding sites on the scaffold molecule.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	WW domain-containing proteins are found in all eukaryotes and play an important role in the regulation of a wide variety of cellular functions such as protein degradation, transcription, and RNA splicing. This gene encodes a protein with two WW domains, a SARAH domain, and a coiled-coil region and is ubiquitously expressed in adult tissues. This protein binds to MST1 (mammalian sterile 20-like kinase 1) and promotes MST1-induced apoptosis. It has also been shown to bind to HAX1 (hematopoietic cell-specific protein 1 (HS1)-associated protein X-1) and to attenuate the anti-apoptotic effects of HAX1. Studies in human and mouse suggest this gene acts as a tumor suppressor. [provided by RefSeq, Aug 2012]

Additional Information

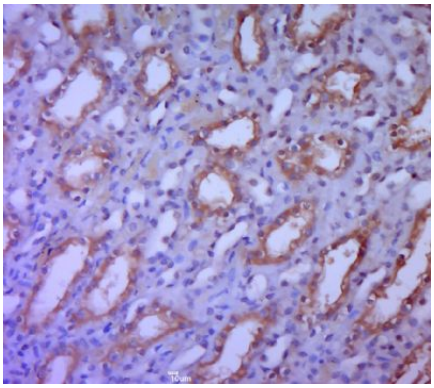
Gene ID	60485
Other Names	Protein salvador homolog 1, 45 kDa WW domain protein, hWW45, SAV1, WW45
Target/Specificity	Ubiquitously expressed in adult tissues with highest expression in the pancreas, aorta and interventricular septum and lowest expression in skeletal muscle. Expression was higher in fetal than in the adult heart. Expressed in various cell lines.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SAV1 (HGNC:17795)
Synonyms	WW45
Function	Regulator of STK3/MST2 and STK4/MST1 in the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis (PubMed:29063833). The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. SAV1 is required for STK3/MST2 and STK4/MST1 activation and promotes cell- cycle exit and terminal differentiation in developing epithelial tissues. Plays a role in centrosome disjunction by regulating the localization of NEK2 to centrosomes, and its ability to phosphorylate CROCC and CEP250. In conjunction with STK3/MST2, activates the transcriptional activity of ESR1 through the modulation of its phosphorylation.
Cellular Location	Nucleus. Cytoplasm
Tissue Location	Ubiquitously expressed in adult tissues with highest expression in the pancreas, aorta and interventricular septum and lowest expression in skeletal muscle. Expression was higher in fetal than in the adult heart. Expressed in various cell lines

Images



Paraformaldehyde-fixed, paraffin embedded (rat kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SAV1) Polyclonal Antibody, Unconjugated (AP56622) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.