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HBXIP Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58537

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O43504
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	9614
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HBXIP
Epitope Specificity	41-91/91
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	Cytoplasm.
SIMILARITY	Belongs to the HBXIP family.
SUBUNIT	Homodimer (Probable). Interacts with phosphorylated BIRC5; the resulting complex binds pro-caspase-9, as well as active caspase-9, but much less efficiently. Interacts with SUPV3L1. Interacts with hepatitis B virus (HBV) oncoprotein HBX C-terminus.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	HBXIP (Hepatitis B virus X interacting protein) complexes with the C-terminus of hepatitis B virus X protein (HBx) and down-regulates hepatitis B virus (HBV) replication. When complexed to BIRC5, it interferes with apoptosome assembly, preventing recruitment of pro-caspase-9 to oligomerized APAF1, thereby selectively suppressing apoptosis initiated via the mitochondrial/cytochrome c pathway.

Additional Information

Gene ID	10542
Other Names	Ragulator complex protein LAMTOR5, Hepatitis B virus X-interacting protein {ECO:0000303|PubMed:9499022, ECO:0000303|Ref.2}, HBV X-interacting protein {ECO:0000303|PubMed:9499022, ECO:0000303|Ref.2}, HBX-interacting protein {ECO:0000303|PubMed:9499022, ECO:0000303|Ref.2}, Late endosomal/lysosomal adaptor and MAPK and MTOR activator 5, LAMTOR5
Target/Specificity	Highly expressed in skeletal and cardiac muscle, followed by pancreas, kidney,

	liver, brain, placenta and lung. Elevated levels in both cancerous and non-cancerous liver tissue of patients with chronic HBV infection compared with hepatic tissue without HBV infection.
Dilution	IHC-P=1:100-500,IHC-F=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	LAMTOR5 (HGNC:17955)
Function	As part of the Ragulator complex it is involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids (PubMed:22980980, PubMed:29158492, PubMed:30181260). Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator plays a dual role for the small GTPases Rag (RagA/RRAGA, RagB/RRAGB, RagC/RRAGC and/or RagD/RRAGD): it (1) acts as a guanine nucleotide exchange factor (GEF), activating the small GTPases Rag and (2) mediates recruitment of Rag GTPases to the lysosome membrane (PubMed:22980980, PubMed:28935770, PubMed:29107538, PubMed:29158492, PubMed:30181260). Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:22980980, PubMed:29158492, PubMed:30181260). When complexed to BIRC5, interferes with apoptosome assembly, preventing recruitment of pro-caspase-9 to oligomerized APAF1, thereby selectively suppressing apoptosis initiated via the mitochondrial/cytochrome c pathway (PubMed:12773388).
Cellular Location	Lysosome. Cytoplasm, cytosol
Tissue Location	Highly expressed in skeletal and cardiac muscle, followed by pancreas, kidney, liver, brain, placenta and lung (PubMed:9499022). Elevated levels in both cancerous and non-cancerous liver tissue of patients with chronic HBV infection compared with hepatic tissue without HBV infection (PubMed:9499022)