

# ELAC2/HPC2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58146

## Product Information

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<b>Application</b>	IHC-P, IHC-F, IF, E
<b>Primary Accession</b>	<a href="#">Q9BQ52</a>
<b>Reactivity</b>	Rat, Dog
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	92219
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human ELAC2
<b>Epitope Specificity</b>	88-190/826
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Mitochondrion. Nucleus. Note=Mainly mitochondrial.
<b>SIMILARITY</b>	Belongs to the RNase Z family.
<b>SUBUNIT</b>	Homodimer. Interacts with PTC1.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	ELAC2 is a zinc phosphodiesterase which displays some tRNA 3' processing endonuclease activity. It is thought to be involved in tRNA maturation, acting by removing a 3' trailer from precursor tRNA. ELAC2 also interacts with activated Smad family member 2 (Smad2) and its nuclear partner forkhead box H1 (also known as FAST-1), and reduced expression can suppress transforming growth factor-beta induced growth arrest. Mutations in this gene result in an increased risk of prostate cancer. A number of allelic variants have been investigated in hereditary prostate cancer.

## Additional Information

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<b>Gene ID</b>	60528
<b>Other Names</b>	Zinc phosphodiesterase ELAC protein 2, 3.1.26.11, ELAC homolog protein 2, Hereditary prostate cancer protein 2, Ribonuclease Z 2, RNase Z 2, tRNA 3 endonuclease 2, tRNase Z 2, ELAC2, HPC2
<b>Target/Specificity</b>	Widely expressed. Highly expressed in heart, placenta, liver, skeletal muscle, kidney, pancreas, testis and ovary. Weakly expressed in brain, lung, spleen, thymus, prostate, small intestine, colon and leukocytes.
<b>Dilution</b>	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyc

<b>Storage</b>	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.
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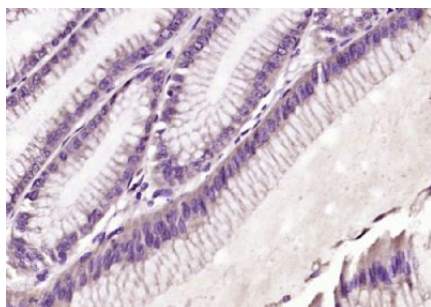
## Protein Information

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<b>Name</b>	ELAC2
<b>Synonyms</b>	HPC2
<b>Function</b>	Zinc phosphodiesterase, which displays mitochondrial tRNA 3'- processing endonuclease activity. Involved in tRNA maturation, by removing a 3'-trailer from precursor tRNA (PubMed: <a href="#">21593607</a> ). Associates with mitochondrial DNA complexes at the nucleoids to initiate RNA processing and ribosome assembly (PubMed: <a href="#">24703694</a> ).
<b>Cellular Location</b>	Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid. Nucleus Note=Mainly mitochondrial
<b>Tissue Location</b>	Widely expressed. Highly expressed in heart, placenta, liver, skeletal muscle, kidney, pancreas, testis and ovary Weakly expressed in brain, lung, spleen, thymus, prostate, small intestine, colon and leukocytes.

## Images

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Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); 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 (ELAC2) Polyclonal Antibody, Unconjugated (AP58146) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.