



# RNase Z2 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01984
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	IHC;IF;ELISA
<b>Gene Name</b>	ELAC2
<b>Protein Name</b>	Zinc phosphodiesterase ELAC protein 2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ELAC2. AA range:161-210
<b>Specificity</b>	RNase Z2 Polyclonal Antibody detects endogenous levels of RNase Z2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	ELAC2; HPC2; Zinc phosphodiesterase ELAC protein 2; ElaC homolog protein 2; Heredity prostate cancer protein 2; Ribonuclease Z 2; RNase Z 2; tRNA 3 endonuclease 2; tRNase Z 2
<b>Observed Band</b>	
<b>Cell Pathway</b>	Mitochondrion . Mitochondrion matrix, mitochondrion nucleoid . Nucleus . Mainly mitochondrial.
<b>Tissue 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>Function</b>	catalytic activity:Endonucleolytic cleavage of RNA, removing extra 3' nucleotides from tRNA precursor, generating 3' termini of tRNAs. A 3'-hydroxy group is left at the tRNA terminus and a 5'-phosphoryl group is left at the trailer molecule.,cofactor:Zinc.,disease:Defects in ELAC2 are involved in prostate cancer (CaP) [MIM:176807].,function:Zinc phosphodiesterase, which displays some tRNA 3'-processing endonuclease activity. Probably involved in tRNA maturation, by removing a 3'-trailer from precursor tRNA.,similarity:Belongs to the RNase Z family.,subunit:Homodimer.,tissue specificity: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.,



## Background

The protein encoded by this gene has a C-terminal domain with tRNA 3' end processing endoribonuclease activity, which catalyzes the removal of the 3' trailer from precursor tRNAs. The protein 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. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009],

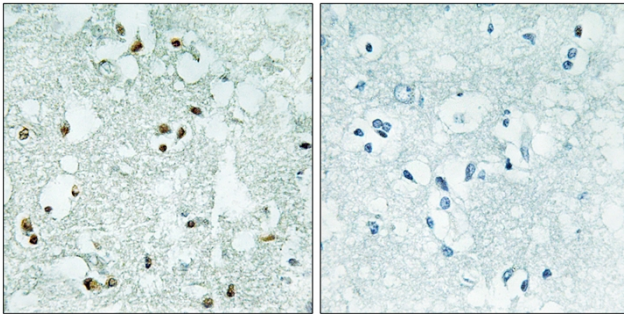
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using ELAC2 Antibody. The picture on the right is blocked with the synthesized peptide.