



RNase Z2 Polyclonal Antibody

Catalog No	YP-Ab-01984
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	ELAC2
Immunogen	The antiserum was produced against synthesized peptide derived from human ELAC2. AA range:161-210
Specificity	RNase Z2 Polyclonal Antibody detects endogenous levels of RNase Z2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	elaC homolog 2 (E. coli);ElaC homolog protein 2;ELAC2;ELC2;HPC2; Ribonuclease Z 2;RNase Z 2;tRNA 3 endonuclease 2;tRNase Z 2;RNase Z2; Zinc phosphodiesterase ELAC protein 2;Heredity prostate cancer protein 2
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Mitochondrion . Mitochondrion matrix, mitochondrion nucleoid . Nucleus . Mainly mitochondrial.
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.
Function	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],

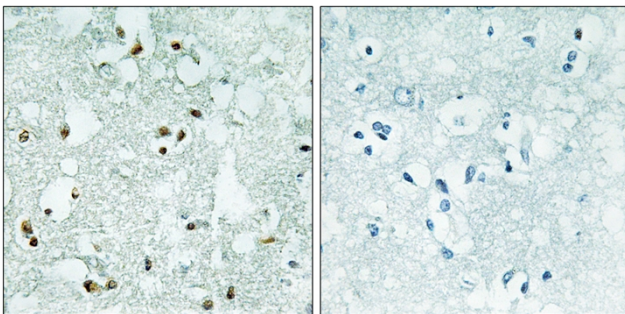
matters needing attention

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.