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RNase L Antibody

Rabbit mAb
Catalog # AP92218

Product Information

Application	WB
Primary Accession	Q05823
Reactivity	Human
Clonality	Monoclonal
Other Names	PRCA1; Ribonuclease4; RibonucleaseL; RNase L; Rnasel; RNS4;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	83533

Additional Information

Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RNase L
Description	Endoribonuclease that functions in the interferon (IFN) antiviral response. In INF treated and virus infected cells, RNASEL probably mediates its antiviral effects through a combination of direct cleavage of single-stranded viral RNAs, inhibition of protein synthesis through the degradation of rRNA, induction of apoptosis, and induction of other antiviral genes.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

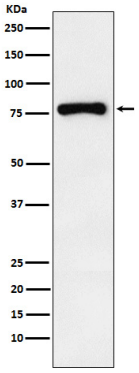
Name	RNASEL {ECO:0000303|PubMed:40010341}
Synonyms	RNS4
Function	Endoribonuclease that functions in the interferon (IFN) antiviral response (PubMed:11585831, PubMed:26263979). In INF treated and virus infected cells, RNASEL probably mediates its antiviral effects through a combination of direct cleavage of single-stranded viral RNAs, inhibition of protein synthesis through the degradation of rRNA, induction of apoptosis, and induction of other antiviral genes (PubMed:11585831, PubMed:26263979). RNASEL mediated apoptosis is the result of a JNK-dependent stress-response pathway leading to cytochrome c release from mitochondria and caspase-dependent apoptosis (PubMed:11585831, PubMed:26263979). Therefore, activation of RNASEL could lead to elimination of virus infected cells under some circumstances (PubMed:11585831, PubMed:26263979). In the crosstalk between autophagy and apoptosis proposed to induce autophagy as an early

stress response to small double-stranded RNA and at later stages of prolonged stress to activate caspase-dependent proteolytic cleavage of BECN1 to terminate autophagy and promote apoptosis (PubMed:26263979). Might play a central role in the regulation of mRNA turnover (PubMed:11585831). Cleaves 3' of UpNp dimers, with preference for UU and UA sequences, to sets of discrete products ranging from between 4 and 22 nucleotides in length. Involved in intercellular immune signaling (PubMed:40010341). Cross-activated by 2',5'- oligoadenylates (2-5A) previously generated in RNA virus-infected cells, triggers type I interferon signaling in uninfected neighboring cells to limit local spread of infection (PubMed:40010341).

Cellular Location Cytoplasm. Mitochondrion

Tissue Location Highly expressed in spleen and thymus followed by prostate, testis, uterus, small intestine, colon and peripheral blood leukocytes

Images



Western blot analysis of RNase L expression in THP1 cell lysate.

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