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RNase L Rabbit mAb

Catalog # AP78187

Product Information

Application	WB
Primary Accession	Q05823
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human RNase L
Purification	Affinity Purified
Calculated MW	83533

Additional Information

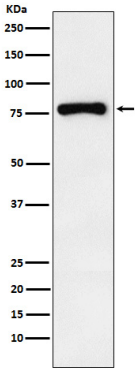
Gene ID	6041
Other Names	RNASEL
Dilution	WB~~1/500-1/1000
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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



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