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Anti-RNase L Rabbit Monoclonal Antibody

Catalog # ABO15638

Product Information

Application	WB
Primary Accession	Q05823
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-RNase L Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human.

Additional Information

Gene ID	6041
Other Names	2-5A-dependent ribonuclease, 2-5A-dependent RNase, 3.1.26.-, Ribonuclease 4, Ribonuclease L, RNase L, RNASEL, RNS4
Calculated MW	83533
Application Details	WB 1:500-1:2000
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 22R14
Immunogen	A synthesized peptide derived from human RNase L
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated 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).

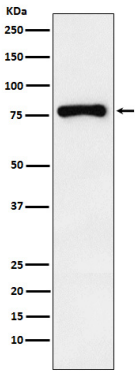
Cellular Location

Cytoplasm. Mitochondrion

Tissue Location

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

Images



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'.