

RNASET2 Protein, Human (HEK293, His)

Cat. No.:	HY-P71015
Synonyms:	Ribonuclease T2; 3.1.27.-; Ribonuclease 6; RNASE6PL
Species:	Human
Source:	HEK293
Accession:	O00584 (D25-H256)
Gene ID:	8635
Molecular Weight:	38-45 kDa

PROPERTIES

AA Sequence	<p>DKRLRDNHEW KKLIMVQHWP ETVCEKIQND CRDPPDYWTI</p> <p>HGLWPKSEGE CNRSWPFNLE EIKDLLPEMR AYWPDVIHSF</p> <p>PNRSRFWKHE WEKHGTCAAQ VDALNSQKKY FGRSLELYRE</p> <p>LDLNSVLLKL GIKPSINYQ VADFKDALAR VYGVIPKIQC</p> <p>LPSPQDEEVQ TIGQIELCLT KQDQQLQNCT EPGEQPSPKQ</p> <p>EVLWLANGAAE SRGLRVCEDEG PVFYPPPKKT KH</p>
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution.
Formulation	Supplied as a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, 20% Glycerol, pH 7.5.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	The RNASET2 protein functions as a ribonuclease, playing a vital role in the innate immune response by recognizing and degrading RNAs from microbial pathogens, subsequently sensed by TLR8. This ribonuclease exhibits a preferential cleavage of single-stranded RNA molecules between purine and uridine residues, a process crucial for the supply of catabolic uridine and the generation of purine-2',3'-cyclophosphate-terminated oligoribonucleotides. These RNase T2 degradation products, in turn, actively promote the RNA-dependent activation of TLR8. Beyond its role in immune response, RNASET2 also plays a
-------------------	--

key role in the degradation of mitochondrial RNA and the processing of non-coding RNA imported from the cytosol into mitochondria. Additionally, it participates in the degradation of mitochondrion-associated cytosolic rRNAs, emphasizing its multifaceted involvement in RNA metabolism and immune regulation.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA