

32-13698: RNASE1 Human

Alternative Name : RNASE1, ribonuclease A family member 1, pancreatic, RAC1, RIB1, RNS1, ribonuclease pancreatic, HP-RNase, RIB-1, RNase Upl-1, RNase 1, Ribonuclease A, RNase A, Ribonuclease 1.

Description

Source: HEK293 Cells.

Physical Appearance: Sterile Filtered colorless solution.

Biological Activity Specific activity is $> 3 \times 10^6$ unit/mg. Defined by the amount of enzyme that hydrolyzes 1nmole of RNA per minute at 25°C.

Ribonuclease 1R (NASE1) is a small protein which is a part of pancreatic ribonuclease enzyme family. NASE1 has 4 disulfide bonds in its native state and cleaves specially after pyrimidine nucleotides. Cleavage takes place in 2 steps: first, the 3',5'-phosphodiester bond is cleaved to create a 2',3'-cyclic phosphodiester intermediate; then, the cyclic phosphodiester is hydrolyzed to a 3'-monophosphate. NASE1 is activated the most with single stranded RNA. NASE1 is inhibited by alkylation of His12 and His119 and activated by potassium and sodium salts. NASE1 hydrolyzes RNA from protein samples.

RNASE1 Human Recombinant produced in HEK cells is a single, glycosylated, polypeptide chain (29-156 a.a) containing a total of 134 amino acids, having a molecular mass of 15.3kDa. RNASE1 is fused to a 6 amino acid His-tag at C-terminus, and is purified by proprietary chromatographic techniques.

Product Info

Amount :	10 µg / 2 µg
Purification :	Greater than 90.0% as determined by SDS-PAGE.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	KESRAKKFQR QHMDS DSSPS SSSTYCNQMM RRRNMTQGRC KPVNTFVHEP LVDVQNVCFQ EKVTCKNGQG NCYKSNSSMH ITDCRLTNGS RYPNCAYRTS PKERHIIVAC EGSPYVPVHF DASVEDSTHH HHHH