



Recombinant Rat Heterogeneous nuclear ribonucleoprotein A1 (Hnrnpa1)

Product Code	CSB-EP010600RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P04256
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	MSKSESPKEP EQLRKLFIGG LSFETTDESL RSHFEQWGTL TDCVVMRDPN TKRSRGGFV TYATVEEVDA AMNARPHKVD GRVVEPKRAV SREDSQRPGA HLTVKKIFVG GIKEDTEHH LRDYFEQYVK IEVIEIMTDR GSGKKRGFAF VTFDDHDSVD KIVIQKYHTV NGHNCVVRKA LCKQEMASAS SSQRGRSGSG NFGGGRGGGF GGNDNFGRGG NFSGRGGFGG SRGGGGYGGG GDGYNGFGND GSNFGGGGSY NDFGNYYNQS SNFGPMKGGN FGGRSSGPYG GGGQYFAKPR NQGGYGGSSS SSSYGSRRF
Source	E.coli
Target Names	Hnrnpa1
Protein Names	Recommended name: Heterogeneous nuclear ribonucleoprotein A1 Short name= hnRNP A1 Alternative name(s): Helix-destabilizing protein Short name= HDP Single-strand RNA-binding protein hnRNP core protein A1
Expression Region	1-320
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full length protein
Target Details	This gene belongs to the A/B subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. While all of the hnRNPs are present in the nucleus, some seem to shuttle between the nucleus and the cytoplasm. The hnRNP proteins have distinct nucleic acid binding properties. This protein has two repeats of quasi-RRM domains that bind to RNAs. It is one of the most abundant core proteins of hnRNP complexes and it is localized to the nucleoplasm. This protein, along with other hnRNP proteins, is exported from the nucleus, probably bound to mRNA, and is immediately re-imported. Its M9 domain acts as both a nuclear localization and nuclear export signal. The encoded protein is involved in the packaging of pre-mRNA into hnRNP particles, transport of poly A+ mRNA from the nucleus to the cytoplasm, and may modulate splice site selection. It is also



thought have a primary role in the formation of specific myometrial protein species in parturition. Multiple alternatively spliced transcript variants have been found for this gene but only two transcripts are fully described. These variants have multiple alternative transcription initiation sites and multiple polyA sites.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.