

Recombinant Human Poly(A)-specific ribonuclease
PARN(PARN)

Catalog No: #AP70618

Package Size: #AP70618-1 20ug #AP70618-2 100ug #AP70618-3 1mg



Description

Product Name	Recombinant Human Poly(A)-specific ribonuclease PARN(PARN)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-639aaSequence Info:Full Length
Other Names	Deadenylating nucleaseDeadenylation nucleasePolyadenylate-specific ribonuclease
Accession No.	O95453
Calculated MW	77.5 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MEIIRSNFKSNLHKVYQAIEEADFFAIDGEGFSGISDGPVSALTNGFDTPPEERYQKLKKHSMDFLLFQFGLCTFK YDYTDSKYITKSFNFYVFPKPFNRSSPDVKFVCQSSSIDFLASQGFDFNKVFRNGIPYLNQEEERQLREQYDE KRSQANGAGALSYVSPNTSKCPVTIPEDQKKFIDQVVEKIEDLLQSEENKNLDLEPCTGFQRKLIYQTLQSWKYP KGIHVETLETEKKERYIVISKVDEEERKRREQQKHAKEQEELNDVGFSRVIAIANSGKLVIGHNMLLDVMHT VHQFYCPLPADLSEFKEMTTCVFPRLDTKLMASQTQPKDIINNTSLAELEKRLKETPFNPPKVESAEGFPSYD TASEQLHEAGYDAYITGLCFISMANYLGSFLSPPKIHVSARSKLIEPFFNKLFLMRVMDIPYLNLEGPDLQPKRD HVLHVTFPKEWKTSPLYQLFSAFGNIQISWIDDTSAFVLSQPEQVKIAVNTSKYAESYRIQTYAEYMGRKQEE KQIKRKWTEDSWKEADSKRLNPQCIPYTLQNHYYRNNSFTAPSTVGKRNLSPSQEEAGLEDGVSGEISDTL EQTDSCAEPLSEGRKKAKKLKRMKKELSPAGSISKNSPATLFEVPDTW
Formulation	Tris-based buffer50% glycerol
Storage	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.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

3'-exoribonuclease that has a preference for poly(A) tails of mRNAs, thereby efficiently degrading poly(A) tails. Exonucleolytic degradation of the poly(A) tail is often the first step in the decay of eukaryotic mRNAs and is also used to silence certain maternal mRNAs translationally during oocyte maturation and early bryonic development. Interacts with both the 3'-end poly(A) tail and the 5'-end cap structure during degradation, the interaction with the cap structure being required for an efficient degradation of poly(A) tails. Involved in nonsense-mediated mRNA decay, a critical process of selective degradation of mRNAs that contain premature stop codons. Also involved in degradation of inherently unstable mRNAs that contain AU-rich elements (AREs) in their 3'-UTR, possibly via its interaction with KHSRP. Probably mediates the removal of poly(A) tails of ARE mRNAs, which constitutes the first step of destabilization.

References

The sequence and analysis of duplication-rich human chromosome 16.Martin J., Han C., Gordon L.A., Terry A., Prabhakar S., She X., Xie G., Hellsten U., Chan Y.M., Altherr M., Couronne O., Aerts A., Bajorek E., Black S., Blumer H., Branscomb E., Brown N.C., Bruno W.J. , Buckingham J.M., Callen

D.F., Campbell C.S., Campbell M.L., Campbell E.W., Caoile C., Challacombe J.F., Chasteen L.A., Chertkov O., Chi H.C., Christensen M., Clark L.M., Cohn J.D., Denys M., Detter J.C., Dickson M., Dimitrijevic-Bussod M., Escobar J., Fawcett J.J., Flowers D., Fotopulos D., Glavina T., Gomez M., Gonzales E., Goodstein D., Goodwin L.A., Grady D.L., Grigoriev I., Groza M., Hammon N., Hawkins T., Haydu L., Hildebrand C.E., Huang W., Israni S., Jett J., Jewett P.B., Kadner K., Kimball H., Kobayashi A., Krawczyk M.-C., Leyba T., Longmire J.L., Lopez F., Lou Y., Lowry S., Ludeman T., Manohar C.F., Mark G.A., McMurray K.L., Meincke L.J., Morgan J., Moyzis R.K., Mundt M.O., Munk A.C., Nandkeshwar R.D., Pitluck S., Pollard M., Predki P., Parson-Quintana B., Ramirez L., Rash S., Retterer J., Ricke D.O., Robinson D.L., Rodriguez A., Salamov A., Saunders E.H., Scott D., Shough T., Stallings R.L., Stalvey M., Sutherland R.D., Tapia R., Tesmer J.G., Thayer N., Thompson L.S., Tice H., Torney D.C., Tran-Gyamfi M., Tsai M., Ulanovsky L.E., Ustaszewska A., Vo N., White P.S., Williams A.L., Wills P.L., Wu J.-R., Wu K., Yang J., DeJong P., Bruce D., Doggett N.A., Deaven L., Schmutz J., Grimwood J., Richardson P., Rokhsar D.S., Eichler E.E., Gilna P., Lucas S.M., Myers R.M., Rubin E.M., Pennacchio L.A. Nature 432:988-994(2004) Research Topic: Transcription

Note: This product is for in vitro research use only and is not intended for use in humans or animals.