

ATP-dependent RNA helicase A Recombinant Protein | DHX9 recombinant protein

Recombinant Human ATP-dependent RNA helicase A

CATALOG # AAA117292	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
-------------------------------	---

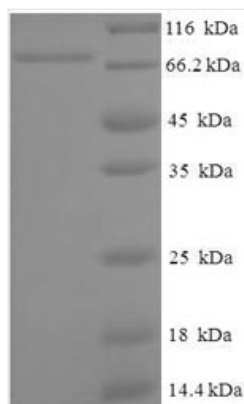
PRODUCT SYNONYMS

ATP-dependent RNA helicase A; Recombinant Human ATP-dependent RNA helicase A; DEAH box protein 9; Leukophysin; LKP; Nuclear DNA helicase II; NDH II; DHX9 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	325-840aa; partial
Sequence	NQVGVPWSP PQSNWNPWTS SNIDEGPLAF ATPEQISMDL KNELMYQLEQ DHDLQAILQE RELLPVKKFE SEILEAISQN SVVIIRGATG CGKTTQVPQF ILDDFIQNDR AAECNIVVTQ PRRISAVSVA ERVAFERGEE PGKSCGYSVR FESILPRPHA SIMFCTVGVL LRKLEAGIRG ISHVIVDEIH ERDINTDFLL VVLRDVVQAY PEVRIVLSA TIDTSMFCEY FFNCPIIEVY GRTYPVQEYF LEDCIQMTHF VPPPKDKKKK DKDDDDGGEDD DANCNLICGD EYGPETRLSM SQLNEKETPF ELIEALLKYI ETLNVPGAVL VFLPGWNLIIY TMQKHLEMNP HFGSHRYQIL PLHSQIPREE QRKVFDPVPV GVTKVILSTN IAETSITIND VVYVIDSCKQ KVKLFTHANN MTNYATVWAS KTNLEQRKGR AGRVRPGFCF HLCSRARFER LETHMTPEMF RTPLHEIALS IKLLRLGGIG QLAKAIEPP PLDAVIEAEH TLRELD
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for DHX9 recombinant protein	Unwinds double-stranded DNA and RNA in a 3' to 5' direction. Alteration of secondary structure may subsequently influence interactions with proteins or other nucleic acids. Functions as a transcriptional activator. Component of the CRD-mediated complex that promotes MYC mRNA stability. Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. As component of a large PER complex is involved in the inhibition of 3' transcriptional termination of circadian target genes such as PER1 and NR1D1 and the control of the circadian rhythms. Positively regulates HIV-1 LTR-directed gene expression.
Product Categories/Family for DHX9 recombinant protein	Epigenetics and Nuclear Signaling

References

- Human RNA helicase A is homologous to the maleless protein of *Drosophila*. Lee C.-G., Hurwitz J.J. *Biol. Chem.* 268:16822-16830(1993) Human protein factory for converting the transcriptome into an in vitro-expressed proteome. Goshima N., Kawamura Y., Fukumoto A., Miura A., Honma R., Satoh R., Wakamatsu A., Yamamoto J., Kimura K., Nishikawa T., Andoh T., Iida Y., Ishikawa K., Ito E., Kagawa N., Kaminaga C., Kanehori K., Kawakami B., Kenmochi K., Kimura R., Kobayashi M., Kuroita T., Kuwayama H., Maruyama Y., Matsuo K., Minami K., Mitsubori M., Mori M., Morishita R., Murase A., Nishikawa A., Nishikawa S., Okamoto T., Sakagami N., Sakamoto Y., Sasaki Y., Seki T., Sono S., Sugiyama A., Sumiya T., Takayama T., Takayama Y., Takeda H., Togashi T., Yahata K., Yamada H., Yanagisawa Y., Endo Y., Imamoto F., Kisu Y., Tanaka S., Isogai T., Imai J., Watanabe S., Nomura N. *Nat. Methods* 5:1011-1017(2008) The DNA sequence and biological annotation of human chromosome 1. Gregory S.G., Barlow K.F., McLay K.E., Kaul R., Swarbreck D., Dunham A., Scott C.E., Howe K.L., Woodfine K., Spencer C.C.A., Jones M.C., Gillson C., Searle S., Zhou Y., Kokocinski F., McDonald L., Evans R., Phillips K., Atkinson A., Cooper R., Jones C., Hall R.E., Andrews T.D., Lloyd C., Ainscough R., Almeida J.P., Ambrose K.D., Anderson F., Andrew R.W., Ashwell R.I.S., Aubin K., Babbage A.K., Baggeley C.L., Bailey J., Beasley H., Bethel G., Bird C.P., Bray-Allen S., Brown J.Y., Brown A.J., Buckley D., Burton J., Bye J., Carder C., Chapman J.C., Clark S.Y., Clarke G., Clee C., Cobley V., Collier R.E., Corby N., Coville G.J., Davies J., Deadman R., Dunn M., Earthrowl M., Ellington A.G., Errington H., Frankish A., Frankland J., French L., Garner P., Garnett J., Gay L., Ghorri M.R.J., Gibson R., Gilby L.M., Gillett W., Glithero R.J., Grafham D.V., Griffiths C., Griffiths-Jones S., Grocock R., Hammond S., Harrison E.S.I., Hart E., Haugen E., Heath P.D., Holmes S., Holt K., Howden P.J., Hunt A.R., Hunt S.E., Hunter G., Isherwood J., James R., Johnson C., Johnson D., Joy A., Kay M., Kershaw J.K., Kibukawa M., Kimberley A.M., King A., Knights A.J., Lad H., Laird G., Lawlor S., Leongamornlert D.A., Lloyd D.M., Loveland J., Lovell J., Lush M.J., Lyne R., Martin S., Mashreghi-Mohammadi M., Matthews L., Matthews N.S.W., McLaren S., Milne S., Mistry S., Moore M.J.F., Nickerson T., O'Dell C.N., Oliver K., Palmeiri A., Palmer S.A., Parker A., Patel D., Pearce A.V., Peck A.I., Pelan S., Phelps K., Phillimore B.J., Plumb R., Rajan J., Raymond C., Rouse G., Saenphimmachak C., Sehra H.K., Sheridan E., Shownkeen R., Sims S., Skuce C.D., Smith M., Steward C., Subramanian S., Sycamore N., Tracey A., Tromans A., Van Helmond Z., Wall M., Wallis J.M., White S., Whitehead S.L., Wilkinson J.E., Willey D.L., Williams H., Wilming L., Wray P.W., Wu Z., Coulson A., Vaudin M., Sulston J.E., Durbin R.M., Hubbard T., Wooster R., Dunham I., Carter N.P., McVean G., Ross M.T., Harrow J., Olson M.V., Beck S., Rogers J., Bentley D.R. *Nature* 441:315-321(2006) A functional interaction between the survival motor neuron complex and RNA polymerase II. Pellizzoni L., Charroux B., Rappsilber J., Mann M., Dreyfuss G.J. *Cell Biol.* 152:75-85(2001) RNA helicase A mediates association of CBP with RNA polymerase II. Nakajima T., Uchida C., Anderson S.F., Lee C.-G., Hurwitz J., Parvin J.D., Montminy M. *Cell* 90:1107-1112(1997) BRCA1 protein is linked to the RNA polymerase II holoenzyme complex via RNA helicase A. Anderson S.F., Schlegel B.P., Nakajima T., Wolpin E.S., Parvin J.D. *Nat. Genet.* 19:254-256(1998) The carboxyl terminus of RNA helicase A contains a bidirectional nuclear transport domain. Tang H., McDonald D., Middlesworth T., Hope T.J., Wong-Staal F. *Mol. Cell. Biol.* 19:3540-3550(1999) Dual roles of RNA helicase A in CREB-dependent transcription. Aratani S., Fujii R., Oishi T., Fujita H., Amano T., Ohshima T., Hagiwara M., Fukamizu A., Nakajima T. *Mol. Cell. Biol.* 21:4460-4469(2001) Functional proteomic analysis of human nucleolus. Scherl A., Coute Y., Deon C., Calle A., Kindbeiter K., Sanchez J.-C., Greco A., Hochstrasser D.F., Diaz J.-J. *Mol. Biol. Cell* 13:4100-4109(2002) Antithetic effects of MBD2a on gene regulation. Fujita H., Fujii R., Aratani S., Amano T., Fukamizu A., Nakajima T. *Mol. Cell. Biol.* 23:2645-2657(2003) RNA helicase A interacts with dsDNA and topoisomerase II α . Zhou K., Choe K.-T., Zaidi Z., Wang Q., Mathews M.B., Lee C.-G. *Nucleic Acids Res.* 31:2253-2260(2003) RNA helicase A interacts with nuclear factor kappaB p65 and functions as a transcriptional coactivator. Tetsuka T., Uranishi H., Sanda T., Asamitsu K., Yang J.-P., Wong-Staal F., Okamoto T. *Eur. J. Biochem.* 271:3741-3751(2004) Arginine methylation of RNA helicase A determines its subcellular localization. Smith W.A., Schurter B.T., Wong-Staal F., David M.J. *Biol. Chem.* 279:22795-22798(2004) Actinomycin D induces histone gamma-H2AX foci and complex formation of gamma-H2AX with Ku70 and nuclear DNA helicase II. Mischo H.E., Hemmerich P., Grosse F., Zhang S.J. *Biol. Chem.* 280:9586-9594(2005) Molecular composition of IMP1 ribonucleoprotein granules. Joelson L., Vikesaa J., Krogh A., Nielsen L.K., Hansen T., Borup R., Johnsen A.H., Christiansen J., Nielsen F.C. *Mol. Cell. Proteomics* 6:798-811(2007) ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. Matsuoka S., Ballif B.A., Smogorzewska A., McDonald E.R. III, Hurov K.E., Luo J., Bakalarski C.E., Zhao Z., Solimini N., Lerenthal Y., Shiloh Y., Gygi S.P., Elledge S.J. *Science* 316:1160-1166(2007) A quantitative atlas of mitotic phosphorylation. Dephoure N., Zhou C., Villen J., Beausoleil S.A., Bakalarski C.E., Elledge S.J., Gygi S.P. *Proc. Natl. Acad. Sci. U.S.A.* 105:10762-10767(2008) An antiviral response directed by PKR phosphorylation of the RNA helicase A. Sadler A.J., Latchoumanin O., Hawkes D., Mak J., Williams B.R. *PLoS Pathog.* 5:E1000311-E1000311(2009) Control of c-myc mRNA stability by IGF2BP1-associated cytoplasmic RNPs. Weidensdorfer D., Stoehr N., Baude A., Lederer M., Koehn M., Schierhorn A., Buchmeier S., Wahle E., Huettelmaier S. *RNA* 15:104-115(2009) Lysine acetylation targets protein complexes and co-regulates major cellular functions. Choudhary C., Kumar C., Gnäd F., Nielsen M.L., Rehman M., Walther T.C., Olsen J.V., Mann M. *Science* 325:834-840(2009) Quantitative phosphoproteomics reveals widespread full phosphorylation site occupancy during mitosis. Olsen J.V., Vermeulen M., Santamaria A., Kumar C., Miller M.L., Jensen L.J., Gnäd F., Cox J., Jensen T.S., Nigg E.A., Brunak S., Mann M. *Sci. Signal.* 3:RA3-RA3(2010) Initial characterization of the human central proteome. Burkard T.R., Planyavsky M., Kaupe I., Breitwieser F.P., Buerckstuehmer T., Bennett K.L., Superti-Furga G., Colinge J. *BMC Syst. Biol.* 5:17-17(2011) A novel role of RNA helicase A in regulation of translation of type I collagen mRNAs. Manojlovic Z., Stefanovic B. *RNA* 18:321-334(2012) An enzyme assisted RP-RPLC approach for in-depth analysis of human liver phosphoproteome. Bian Y., Song C., Cheng K., Dong M., Wang F., Huang J., Sun D., Wang L., Ye M., Zou H.J. *Proteomics* 96:253-262(2014)

NCBI AND UNIPROT INFORMATION

NCBI GI #	100913206
NCBI GeneID	1660
NCBI Accession #	NP_001348.2
NCBI GenBank Nucleotide #	NM_001357.4
UniProt Accession #	Q08211; Q05CI5; Q12803; Q32Q22; Q5VY62; Q6PD69; Q99556; B2RNV4
Molecular Weight	61.6 kDa
NCBI Official Full Name	ATP-dependent RNA helicase A
NCBI Official Synonym Full Names	DEAH-box helicase 9
NCBI Official Symbol	DHX9
NCBI Official Synonym Symbols	LKP; RHA; DDX9; NDH2; NDHII
NCBI Protein Information	ATP-dependent RNA helicase A
UniProt Protein Name	ATP-dependent RNA helicase A
UniProt Gene Name	DHX9
UniProt Synonym Gene Names	DDX9; LKP; NDH2; RHA; LKP; NDH II
UniProt Entry Name	DHX9_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/dhx9-recombinant-protein-e-coli/117292>