

Argonaute-2 Recombinant Protein | AGO2 recombinant protein

Recombinant Human Protein argonaute-2

CATALOG # AAA117418	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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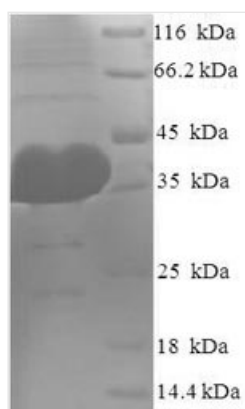
PRODUCT SYNONYMS

Argonaute-2; Recombinant Human Protein argonaute-2; Argonaute RISC catalytic component 2; AGO2 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	517-818aa; Partial
Sequence	LVVVILPGKT PVYAEVKRVG DTVLGMATQC VQMKNVQRTT PQTLSNLCLK INVKLGGVNN ILLPQGRPPV FQQPVIFLGA DVTHPPAGDG KKPSIAAVVG SMDAHPNRYC ATVRVQQHRQ EIIQDLAAMV RELLIQFYKS TRFKPTRIIF YRDGVSEGGF QQVLHHELLA IREACIKLEK DYQPGITFIV VQKRHHTRLF CTDKNERVGK SGNIPAGTTV DTKITHPTEF DFYLCSHAGI QGTSRPSHYH VLWDDNRFSS DELQILTYQL CHTYVRCTRS VSIPAPAYYA HLVAFRARYH LV
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 AGO2 recombinant protein	Required for RNA-mediated gene silencing (RNAi) by the RNA-induced silencing complex (RISC). The 'minimal RISC' appears to include AGO2 bound to a short guide RNA such as a microRNA (miRNA) or short interfering RNA (siRNA). These guide RNAs direct RISC to complementary mRNAs that are targets for RISC-mediated gene silencing. The precise mechanism of gene silencing depends on the degree of complementarity between the miRNA or siRNA and its target. Binding of RISC to a perfectly complementary mRNA generally results in silencing due to endonucleolytic cleavage of the mRNA specifically by AGO2. Binding of RISC to a partially complementary mRNA results in silencing through inhibition of translation, and this is independent of endonuclease activity. May inhibit translation initiation by binding to the 7-methylguanosine cap, thereby preventing the recruitment of the translation initiation factor eIF4-E. May also inhibit translation initiation via interaction with EIF6, which itself binds to the 60S ribosomal subunit and prevents its association with the 40S ribosomal subunit. The inhibition of translational initiation leads to the accumulation of the affected mRNA in cytoplasmic processing bodies (P-bodies), where mRNA degradation may subsequently occur. In some cases RISC-mediated translational repression is also observed for miRNAs that perfectly match the 3' untranslated region (3'-UTR). Can also up-regulate the translation of specific mRNAs under certain growth conditions. Binds to the AU element of the 3'-UTR of the TNF (TNF-alpha) mRNA and up-regulates translation under conditions of serum starvation. Also required for transcriptional gene silencing (TGS), in which short RNAs known as antigene RNAs or agRNAs direct the transcriptional repression of complementary promoter regions
Product Categories/Family for AGO2 recombinant protein	Epigenetics and Nuclear Signaling
References	DNA sequence and analysis of human chromosome 8.Nusbaum C., Mikkelsen T.S., Zody M.C., Asakawa S., Taudien S., Garber M., Kodira C.D., Schueler M.G., Shimizu A., Whittaker C.A., Chang J.L., Cuomo C.A., Dewar K., FitzGerald M.G., Yang X., Allen N.R., Anderson S., Asakawa T., Blechschmidt K., Bloom T., Borowsky M.L., Butler J., Cook A., Corum B., DeArellano K., DeCaprio D., Dooley K.T., Dorris L. III, Engels R., Gloeckner G., Hafez N., Hagopian D.S., Hall J.L., Ishikawa S.K., Jaffe D.B., Kamat A., Kudoh J., Lehmann R., Lokitsang T., Macdonald P., Major J.E., Matthews C.D., Mauceli E., Menzel U., Mihalev A.H., Minoshima S., Murayama Y., Naylor J.W., Nicol R., Nguyen C., O'Leary S.B., O'Neill K., Parker S.C.J., Polley A., Raymond C.K., Reichwald K., Rodriguez J., Sasaki T., Schilhabel M., Siddiqui R., Smith C.L., Sneddon T.P., Talamas J.A., Tenzin P., Topham K., Venkataraman V., Wen G., Yamazaki S., Young S.K., Zeng Q., Zimmer A.R., Rosenthal A., Birren B.W., Platzer M., Shimizu N., Lander E.S.Nature 439:331-335(2006)

NCBI AND UNIPROT INFORMATION

NCBI GI #	257467482
NCBI GeneID	27161
NCBI Accession #	NP_001158095.1
NCBI GenBank Nucleotide #	NM_001164623.1
UniProt Accession #	Q9UKV8 ; Q8TCZ5 ; Q8WV58 ; Q96ID1
Molecular Weight	36.1 kDa
NCBI Official Full Name	protein argonaute-2 isoform 2
NCBI Official Synonym Full Names	argonaute 2, RISC catalytic component
NCBI Official Symbol	AGO2
NCBI Official Synonym Symbols	Q10; EIF2C2
NCBI Protein Information	protein argonaute-2
UniProt Protein Name	Protein argonaute-2
UniProt Gene Name	AGO2
UniProt Synonym Gene Names	EIF2C2; Argonaute2; hAgo2; eIF-2C 2; eIF2C 2; PPD
UniProt Entry Name	AGO2_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.

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Online datasheet: <https://stage.aaabiotech.com/ago2-recombinant-protein-e-coli-or-yeast-or-baculovirus-or-mammalian-cell/117418>