RP02933

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Recombinant Human Argonaute-1/AGO1 Protein

Catalog No.: RP02933 Recombinant 1 Publications

Sequence Information

Species	Gene ID	Swiss Prot
Baculovirus-Insect Cells	26523	Q9UL18

Tags
N-His

Synonyms
Q99; EIF2C; hAgo1; EIF2C1; GERP95; NEDLBAS;AGO1

Product Information

Source	Purification
Baculovirus-Insect Cells	≥ 85 % as determined by SDS-PAGE.

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of 50mM Tris, 100mM NaCl, 10% Gly, 0.5 PMSF, 0.5mM EDTA, pH 8.0.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

Protein argonaute-1, also known as eukaryotic translation initiation factor 2C 1, EIF2C1, and AGO1, is a member of the argonaute family and ago subfamily. Protein argonaute-1 in humans is encoded by the EIF2C1 gene. This gene is located on chromosome 1 in a cluster of closely related family members including argonaute 3, and argonaute 4. This genomic region is frequently lost in human cancers such as Wilms tumors, neuroblastoma, and carcinomas of the breast, liver, and colon. The human EIF2C1 gene is ubiquitously expressed at low to medium levels. Differential polyadenylation and splicing result in a complex transcriptional pattern.EIF2C1 protein contains onePAZ domain and onePiwi domain. It is required for RNA-mediated gene silencing (RNAi) and transcriptional gene silencing (TGS) of promoter regions which are complementary to bound short antigene RNAs (agRNAs). EIF2C1 binds to short RNAs such as microRNAs (miRNAs) or short interfering RNAs (siRNAs), and represses the translation of mRNAs which are complementary to them.

Basic Information

Description
Recombinant Human Argonaute-1/AGO1 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Ala857) of human Argonaute-1/AGO1 (Accession #NP_036331.1) fused with a 6×His tag at the N-terminus.

Bio-Activity

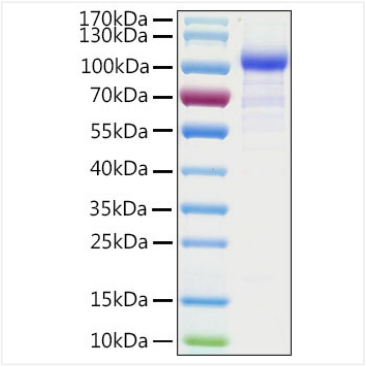
Shipping
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Argonaute-1/AGO1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.