

Recombinant Human AGO1/Argonaute 1/EIF2C1 Protein (His Tag)

Catalog No. PKSH031192

Note: Centrifuge before opening to ensure complete recovery of vial contents.

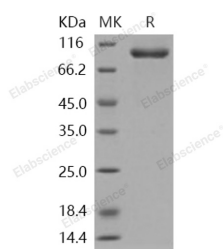
Description

Synonyms	EIF2C;EIF2C1;GERP95;Q99
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Ala 857
Accession	NP_036331.1
Calculated Molecular Weight	99.5 kDa
Observed molecular weight	99.5 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 50mM Tris, 100mM NaCl, 10% glycerol, 0.5 PMSF, 0.5mM EDTA, pH 8.0 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

Protein argonaute-1, also known as eukaryotic translation initiation factor 2C 1, EIF2C1, and AGO1, is a member of the

For Research Use Only

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 antigenic 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.