



## Recombinant Protein Technical Manual

**Recombinant Human AGO1/Argonaute 1/EIF2C1  
Protein (His Tag)**  
RPES2615

### Product Data:

**Product SKU:** RPES2615

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_036331.1

### Protein Information:

**Molecular Mass:** 99.5 kDa

**AP Molecular Mass:** 99.5 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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% Gly, 0.5 PMSF, 0.5mM EDTA, pH 8.0

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** EIF2C;EIF2C1;GERP95;Q99

## Immunogen Information:

**Sequence:** Met 1-Ala 857

## Background:

Protein argonaute, also known as eukaryotic translation initiation factor 2C 1, EIF2C1, and AGO1, is a member of the argonaute family and ago subfamily. Protein argonaute 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 one PAZ domain and one Piwi 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.