

## Recombinant Human Argonaute-1/AGO1 Protein

RPCB2190

### Protein Information

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|-----------------------|----------|------------------------|--------------------------|
| <b>Size:</b>          | 50 µg    | <b>Tag:</b>            | N-His                    |
| <b>Reactivity:</b>    | Human    | <b>Expressed Host:</b> | Baculovirus-Insect Cells |
| <b>Calculated MW:</b> | 99.5 kDa | <b>Observed MW:</b>    | 99 kDa                   |

### Background

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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 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.

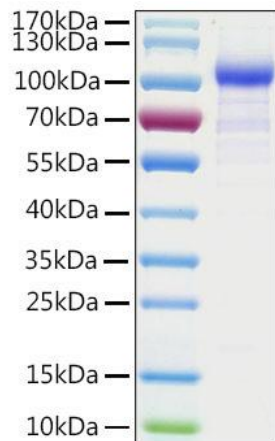
### Properties

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|---------------------|---|
| <b>Synonyms:</b>    | Q99, EIF2C, hAgo1, EIF2C1, GERP95, NEDLBAS, AGO1  |
| <b>Gene ID:</b>     | 26523   |
| <b>Endotoxin:</b>   | < 1 EU/µg of the protein by LAL method.   |
| <b>Description:</b> | High quality, high purity and low endotoxin recombinant Recombinant Human Argonaute-1/AGO1 Protein (RPCB2190), tested reactivity in Baculovirus-Insect Cells and has been validated in SDS-PAGE. 100% guaranteed. |
| <b>Purity:</b>      | ≥ 85 % as determined by SDS-PAGE.   |
| <b>Storage:</b>     | Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.    |

## Validation Data

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Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.