Datasheet for ABIN7320195

AGO2 Protein (His tag)

1 Image

Go to Product page

Overview

Quantity:	20 µg
Target:	AGO2
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AGO2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse AGO2/Argonaute 2/EIF2C2 Protein (His Tag)
Sequence:	Met 1-Ala 860
Characteristics:	A DNA sequence encoding the mouse AGO2 (Q8CJG0) (Met 1-Ala 860) was fused with a polyhistidine tag at the N-terminus.
Purity:	> 88 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.

Target Details

Target:	AGO2
Alternative Name:	AGO2/Argonaute 2/EIF2C2 (AGO2 Products)
Background:	Background: Argonaute 2 (AGO2), also known as Eukaryotic translation initiation factor 2C2 (EIF2C2), belongs to the Argon family, AGO subfamily, which is a component of the RNA-induced silencing complex (RISC) and mediates small interfering

Target Details

(siRNA)-directed mRNA cleavage and microRNA translational suppression. AGO2 protein is the catalytic engine of mamma RNAi. It contains a PIWI domain that is structurally related to RNases H and possibly shares with them a two-metal-ion catalysis mechanism. Human AGO2 was unable to cleave preformed RNA duplexes and exhibited weaker binding affinity f RNA duplexes compared with the single strand RNA. The enzyme exhibited greater RNase H activity in the presence of Mn compared with Mg2+. Human AGO2 exhibited weaker binding affinities and reduced cleavage activities for antisense RNAs with either a 5'-terminal hydroxyl or abasic nucleotide. In mouse hematopoiesis, AGO2 controls early development of lymph and erythroid cells. AGO2 is a highly specialized member of the Argonaute family with an essential nonredundant Slicer-independent function within the mammalian miRNA pathway. AGO2 regulates dFMR1 expression, and the relationship betv dFMR1 and AGO2 was defined by their physical interaction and co-regulation of downstream targets. AGO2 and dFMR1 ar also connected through a regulatory relationship. AGO2 is a regulator of dFMR1 expression and have clarified an importan developmental role for AGO2 in the nervous system and germ line that requires dFMR1 function. In addition, AGO2 is regul at both the transcriptional and posttranslational level, and also implicate AGO2 and enhanced micro-RNA activity in the tumorigenic progression of breast cancer cell lines.

Synonym:

1110029L17Rik,2310051F07Rik,AI225898,AL022874,AW546247,Eif2c2,ENSMUSG00000072493,Gerp95,Gm10365,mKIAA

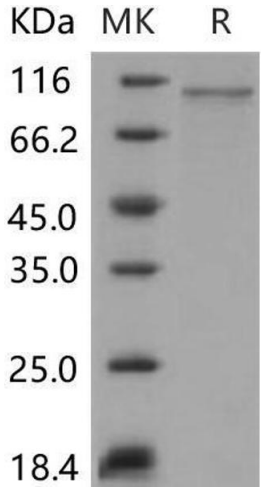
Molecular Weight:	99 kDa
UniProt:	Q8CJG0
Pathways:	Fc-epsilon Receptor Signaling Pathway, Regulatory RNA Pathways, EGFR Signaling Pathway, Neurotrophin Signaling Pathw Ribonucleoprotein Complex Subunit Organization

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4, 10 % glycerol
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	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.



Western Blotting

Image 1.