eIF2C1 (N-16): sc-32656



The Power to Question

BACKGROUND

Eukaryotic translation initiation factor 2C (eIF2C) proteins (argonaute family) influence RNA interference (RNAi) as components of the RNA-inducible silencing complex (RISC) or microRNA (miRNA)-containing ribonucleoprotein particle (miRNP). Small RNAs, including small interfering RNAs (siRNAs) and miRNAs, can silence target genes through mechanisms that utilize RISC or miRNP particles. eIF2C1 (argonaute 1, AG01, eIF2C, GERP95, Q99) and Dicer1 play a coordinated role in siRNA-mediated gene silencing. eIF2C2 (slicer, argonaute 2, AG02, Q10) is a RISC component that can concentrate in cytoplasmic processing bodies (P-bodies) and catalyze mRNA cleavage. Mammalian P-bodies contain mRNAs and have an association with miRNA-induced translational silencing and siRNA-induced mRNA degradation. Additional eIF2C proteins include eIF2C3 (argonaute 3, AG03), eIF2C4 (argonaute 4, AG04) and meIF2c5 (mouse argonaute 5).

CHROMOSOMAL LOCATION

Genetic locus: EIF2C1 (human) mapping to 1p34.3; Eif2c1 (mouse) mapping to 4 D2.2.

SOURCE

eIF2C1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of eIF2C1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32656 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

elF2C1 (N-16) is recommended for detection of elF2C1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

elF2C1 (N-16) is also recommended for detection of elF2C1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for eIF2C1 siRNA (h): sc-44408, eIF2C1 siRNA (m): sc-44647, eIF2C1 shRNA Plasmid (h): sc-44408-SH, eIF2C1 shRNA Plasmid (m): sc-44647-SH, eIF2C1 shRNA (h) Lentiviral Particles: sc-44408-V and eIF2C1 shRNA (m) Lentiviral Particles: sc-44647-V.

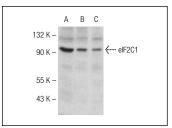
Molecular Weight of eIF2C1: 97 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



elF2C1 (N-16): sc-32656. Western blot analysis of elF2C1 expression in HeLa (**A**), Hep G2 (**B**) and Jurkat (**C**) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **eIF2C (B-3): sc-376696**, our highly recommended monoclonal aternative to eIF2C1 (N-16).

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