

eIF2C2 (N-13): sc-32659

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, AGO1, eIF2C, GERP95, Q99) and Dicer1 play a coordinated role in siRNA-mediated gene silencing. eIF2C2 (slicer, argonaute 2, AGO2, 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, AGO3), eIF2C4 (argonaute 4, AGO4) and mEIF2c5 (mouse argonaute 5).

CHROMOSOMAL LOCATION

Genetic locus: EIF2C2 (human) mapping to 8q24.3; Eif2c2 (mouse) mapping to 15 D3.

SOURCE

eIF2C2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of eIF2C2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-32659 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

eIF2C2 (N-13) is recommended for detection of eIF2C2 (also designated argonaute 2 or slicer) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

eIF2C2 (N-13) is also recommended for detection of eIF2C2 (also designated argonaute 2 or slicer) in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for eIF2C2 siRNA (h): sc-44409, eIF2C2 siRNA (m): sc-44659, eIF2C2 shRNA Plasmid (h): sc-44409-SH, eIF2C2 shRNA Plasmid (m): sc-44659-SH, eIF2C2 shRNA (h) Lentiviral Particles: sc-44409-V and eIF2C2 shRNA (m) Lentiviral Particles: sc-44659-V.

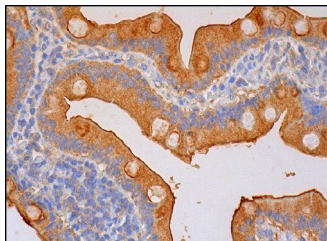
Molecular Weight of eIF2C2: 94 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



eIF2C2 (N-13): sc-32659. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Castanotto, D., et al. 2009. CRM1 mediates nuclear-cytoplasmic shuttling of mature microRNAs. *Proc. Natl. Acad. Sci. USA* 106: 21655-21659.
2. Hassan, M.Q., et al. 2010. Ribonucleoprotein immunoprecipitation (RNP-IP): a direct *in vivo* analysis of microRNA-targets. *J. Cell. Biochem.* 110: 817-822.
3. Hassan, M.Q., et al. 2010. A network connecting Runx2, SATB2, and the miR-23a~27a~24-2 cluster regulates the osteoblast differentiation program. *Proc. Natl. Acad. Sci. USA* 107: 19879-19884.
4. Apornetawan, C., et al. 2011. Hypomethylation of intragenic LINE-1 represses transcription in cancer cells through AGO2. *PLoS ONE* 6: e17934.

STORAGE

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

RESEARCH USE

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



Try **eIF2C (B-3): sc-376696** or **eIF2C2 (4F9): sc-53521**, our highly recommended monoclonal alternatives to eIF2C2 (N-13). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **eIF2C (B-3): sc-376696**.