

IQSEC2 (N-14): sc-168199

BACKGROUND

IQSEC2 (IQ motif and SEC7 domain-containing protein 2) is a 1,478 amino acid protein that belongs to the BRAG family and contains one IQ domain, one PH domain and a SEC7 domain. Localizing to the cytoplasm, IQSEC2 is expressed in brain, kidney and small intestine, with weaker levels of expression in placenta, pancreas, ovary, prostate and liver. IQSEC2 is a component of the postsynaptic density at excitatory synapses, and interacts with ARF family members as a guanine nucleotide exchange factor. Through the activation of ARF substrates, IQSEC2 may play a crucial role in cytoskeletal and synaptic organization. The gene encoding IQSEC2 maps to the human X chromosome. Defects to the IQSEC2 gene have been linked to mental retardation X-linked type 1 (MRX1), a condition characterized by decreased intellectual function. IQSEC2 exists as three isoforms due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IQSEC2 (human) mapping to Xp11.22; Iqsec2 (mouse) mapping to X F3.

SOURCE

IQSEC2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IQSEC2 of human origin.

STORAGE

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

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-168199 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IQSEC2 (N-14) is recommended for detection of IQSEC2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with IQSEC1 or IQSEC3.

IQSEC2 (N-14) is also recommended for detection of IQSEC2 in additional species, including equine and porcine.

Suitable for use as control antibody for IQSEC2 siRNA (h): sc-91115, IQSEC2 siRNA (m): sc-146278, IQSEC2 shRNA Plasmid (h): sc-91115-SH, IQSEC2 shRNA Plasmid (m): sc-146278-SH, IQSEC2 shRNA (h) Lentiviral Particles: sc-91115-V and IQSEC2 shRNA (m) Lentiviral Particles: sc-146278-V.

Molecular Weight of IQSEC2: 162 kDa.

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.

RESEARCH USE

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

PROTOCOLS

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