SANTA CRUZ BIOTECHNOLOGY, INC.

AMMECR1 (G-13): sc-131384

BACKGROUND

AMMECR1 (Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1), also known as AMME syndrome candidate gene 1 protein, is a 333 amino acid protein that contains one AMMECR1 domain. Encoded by a gene that maps to human chromosome Xq23, AMMECR1 is widely conserved, from *Caenorhabditis elegans* and yeast to microorganisms, with exon 2 encoding an evolutionarily conserved, six amino acid domain. Containing a glycine-rich N terminus, the AMMECR1 protein exhibits putative nuclear localization and a substantial level of instability, suggesting it plays a role in regulation. Additionally, numerous potential phosphorylation sites imply that AMMECR1 is subject to stringent regulation. AMMECR1 defects are linked to Alport syndrome, an X-linked contiguous gene deletion syndrome characterized by glomerulonephritis, deafness, mental retardation, midface hypoplasia and elliptocytosis.

REFERENCES

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2. Jonsson, J.J., et al. 1998. Alport syndrome, mental retardation, midface hypoplasia, and elliptocytosis: a new X linked contiguous gene deletion syndrome? J. Med. Genet. 35: 273-278.
3. Vitelli, F., et al. 1999. Identification and characterization of a highly conserved protein absent in the Alport syndrome (A), mental retardation (M), midface hypoplasia (M), and elliptocytosis (E) contiguous gene deletion syndrome (AMME). Genomics 55: 335-340.
4. Vitelli, F., et al. 2000. Identification and characterization of mouse orthologs of the AMMECR1 and FACL4 genes deleted in AMME syndrome: orthology of Xq22.3 and MmuXF1-F3. Cytogenet. Cell Genet. 88: 259-263.
5. Kashtan, C.E. 2000. Alport syndromes: phenotypic heterogeneity of progressive hereditary nephritis. Pediatr. Nephrol. 14: 502-512.
6. Ferrante, M.I., et al. 2001. IL1RAPL2 maps to Xq22 and is specifically expressed in the central nervous system. Gene 275: 217-221.
7. Meloni, I., et al. 2002. Alport syndrome and mental retardation: clinical and genetic dissection of the contiguous gene deletion syndrome in Xq22.3 (ATS-MR). J. Med. Genet. 39: 359-365.

CHROMOSOMAL LOCATION

Genetic locus: AMMECR1 (human) mapping to Xq23; Ammecr1 (mouse) mapping to X F2.

SOURCE

AMMECR1 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AMMECR1 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-131384 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AMMECR1 (G-13) is recommended for detection of AMMECR1 isoforms 1, 2 and 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with family member AMMECR1L.

Suitable for use as control antibody for AMMECR1 siRNA (h): sc-91137, Ammecr1 siRNA (m): sc-141049, AMMECR1 shRNA Plasmid (h): sc-91137-SH, Ammecr1 shRNA Plasmid (m): sc-141049-SH, AMMECR1 shRNA (h) Lentiviral Particles: sc-91137-V and Ammecr1 shRNA (m) Lentiviral Particles: sc-141049-V.

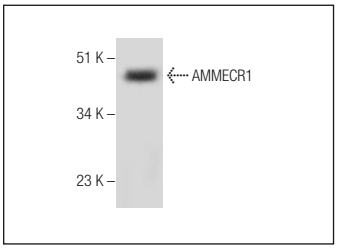
Molecular Weight of AMMECR1: 36 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

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



AMMECR1 (G-13): sc-131384. Western blot analysis of AMMECR1 expression in MCF7 whole cell lysate.

RESEARCH USE

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