AAR2 (Y-18): sc-85419



The Power to Question

BACKGROUND

Representing about 2% of human DNA, chromosome 20 consists of approximately 63 million bases and 600 genes. Chromosome 20 contains a region with numerous genes expressed in the epididymis which are thought important for seminal production and some viewed as potential targets for male contraception. The PRNP gene encoding the prion protein associated with spongiform encephalopathies, like Creutzfeldt-Jakob disease, is found on chromosome 20. Amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome are also associated with chromosome 20. The C20orf4 gene product has been provisionally designated C20orf4 pending further characterization.

REFERENCES

- 1. Prusiner, S.B. 1998. The prion diseases. Brain Pathol. 8: 499-513.
- Collins, S., McLean, C.A. and Masters, C.L. 2001. Gerstmann-Sträussler-Scheinker syndrome, fatal familial insomnia and kuru: a review of these less common human transmissible spongiform encephalopathies. J. Clin. Neurosci. 8: 387-397.
- Masullo, C. and Macchi, G. 2001. Does PRNP gene control the clinical and pathological phenotype of human spongiform transmissible encephalopathies? Clin. Neuropathol. 20: 19-25.
- Joó, J.G., Beke, A., Tóth-Pál, E., Hargitai, B., Szigeti, Z., Papp, C. and Papp, Z. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. J. Reprod. Med. 51: 209-212.
- Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. Epilepsia 47: 543-549.
- Elghezal, H., Hannachi, H., Mougou, S., Kammoun, H., Triki, C. and Saad, A. 2007. Ring chromosome 20 syndrome without deletions of the subtelomeric and CHRNA4-KCNQ2 genes loci. Eur. J. Med. Genet. 50: 441-445.
- 7. Kazantsev, A.G. 2007. Cellular pathways leading to neuronal dysfunction and degeneration. Drug News Perspect. 20: 501-509.
- 8. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. Asian J. Androl. 9: 540-544.
- 9. O'Rand, M.G., Widgren, E.E., Wang, Z. and Richardson, R.T. 2007. Eppin: an epididymal protease inhibitor and a target for male contraception. Soc. Reprod. Fertil. Suppl. 63: 445-453.

CHROMOSOMAL LOCATION

Genetic locus: AAR2 (human) mapping to 20q11.23; Aar2 (mouse) mapping to 2 H1.

SOURCE

AAR2 (Y-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of AAR2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85419 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AAR2 (Y-18) is recommended for detection of AAR2 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).

AAR2 (Y-18) is also recommended for detection of AAR2 in additional species, including equine, canine, bovine and porcine.

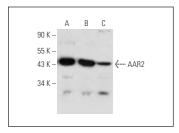
Suitable for use as control antibody for AAR2 siRNA (h): sc-72735, AAR2 siRNA (m): sc-141871, AAR2 shRNA Plasmid (h): sc-72735-SH, AAR2 shRNA Plasmid (m): sc-141871-SH, AAR2 shRNA (h) Lentiviral Particles: sc-72735-V and AAR2 shRNA (m) Lentiviral Particles: sc-141871-V.

Positive Controls: HEK293 whole cell lysate: sc-45136, HeLa whole cell lysate: sc-2206 or MCF7 whole cell lysate: sc-2206.

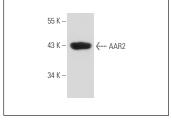
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA







AAR2 (Y-18): sc-85419. Western blot analysis of AAR2 expression in HEK293 whole cell lysate.

STORAGE

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