

ACRV1 (E-13): sc-167038

BACKGROUND

ACRV1 (acrosomal vesicle protein 1), also known as acrosomal protein SP-10 or SPACA2, is a 265 amino acid protein. ACRV1 is encoded by a gene that maps to human chromosome 11q24.2, at the junction between 11q23 and 11q24. Containing four exons, ACRV1 may experience cryptic splicing and exon skipping. ACRV1 exists as 11 alternatively spliced isoforms and may be involved in sperm-zona binding or penetration. ACRV1 encodes a testis-specific, differentiation antigen, acrosomal vesicle protein 1 that originates in the acrosomal vesicle during spermatogenesis, and is affiliated with acrosomal membranes and mature sperm matrix. ACRV1 is a potential contraceptive vaccine immunogen.

REFERENCES

1. Wright, R.M., et al. 1990. Cloning and sequencing of cDNAs coding for the human intra-acrosomal antigen SP-10. *Biol. Reprod.* 42: 693-701.
2. Homyk, M., et al. 1990. Differential diagnosis of immature germ cells in semen utilizing monoclonal antibody MHS-10 to the intra-acrosomal antigen SP-10. *Fertil. Steril.* 53: 323-330.
3. Herr, J.C., et al. 1991. Assignment of the gene for human intra-acrosomal protein SP-10 to the p12—q13 region of chromosome 11. *J. Androl.* 12: 281-287.
4. Herr, J.C., et al. 1992. Purification and microsequencing of the intra-acrosomal protein SP-10. Evidence that SP-10 heterogeneity results from endoproteolytic processes. *Biol. Reprod.* 47: 11-20.
5. Wright, R.M., et al. 1993. Cloning and characterization of the gene coding for the human acrosomal protein SP-10. *Biol. Reprod.* 49: 316-325.
6. Golden, W.L., et al. 1993. Refinement of the localization of the gene for human intraacrosomal protein SP-10 (ACRV1) to the junction of bands q23→q24 of chromosome 11 by nonisotopic *in situ* hybridization. *Genomics* 18: 446-449.

CHROMOSOMAL LOCATION

Genetic locus: *Acrv1* (mouse) mapping to 9 A4.

SOURCE

ACRV1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ACRV1 of mouse origin.

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-167038 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ACRV1 (E-13) is recommended for detection of ACRV1 of mouse and rat 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).

ACRV1 (E-13) is also recommended for detection of ACRV1 in additional species, including bovine and porcine.

Suitable for use as control antibody for ACRV1 siRNA (m): sc-140825, ACRV1 shRNA Plasmid (m): sc-140825-SH and ACRV1 shRNA (m) Lentiviral Particles: sc-140825-V.

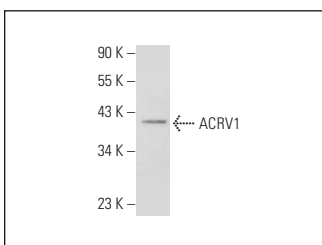
Molecular Weight of ACRV1: 24-47 kDa.

Positive Controls: mouse testis extract: sc-2405.

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



ACRV1 (E-13): sc-167038. Western blot analysis of ACRV1 expression in mouse testis tissue extract.

RESEARCH USE

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

MONOS
Satisfaction
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Try **ACRV1 (A-9): sc-398536**, our highly recommended monoclonal alternative to ACRV1 (E-13).