SANTA CRUZ BIOTECHNOLOGY, INC.

ACTR8 (C-15): sc-99766



BACKGROUND

ACTR8 (Actin-related protein 8), also known as ARP8 or INO80N, is a 624 amino acid protein that localizes to the cytoplasm and the cytoskeleton and belongs to the Actin family. Functioning as a component of the INO80 chromatin remodeling complex, ACTR8 interacts with a variety of other Actinrelated proteins and, via these interactions, is thought to be involved in transcriptional regulation and chromosomal alignment events. The gene encoding ACTR8 maps to chromosome 3. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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- 3. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. Nature 440: 1194-1198.
- 4. Ogiwara, H., et al. 2007. The INO80 chromatin remodeling complex functions in sister chromatid cohesion. Cell Cycle 6: 1090-1095.
- 5. van Attikum, H., et al. 2007. Distinct roles for SWR1 and INO80 chromatin remodeling complexes at chromosomal double-strand breaks. EMBO J. 26: 4113-4125.
- 6. Yu, E.Y., et al. 2007. Regulation of telomere structure and functions by subunits of the INO80 chromatin remodeling complex. Mol. Cell. Biol. 27: 5639-5649.
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- 8. Aoyama, N., et al. 2008. The actin-related protein hArp8 accumulates on the mitotic chromosomes and functions in chromosome alignment. Exp. Cell Res. 314: 859-868.
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CHROMOSOMAL LOCATION

Genetic locus: ACTR8 (human) mapping to 3p21.1; Actr8 (mouse) mapping to 14 B.

SOURCE

ACTR8 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ACTR8 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-99766 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ACTR8 (C-15) is recommended for detection of ACTR8 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 other ACTR family members.

ACTR8 (C-15) is also recommended for detection of ACTR8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ACTR8 siRNA (h): sc-78490, ACTR8 siRNA (m): sc-140849, ACTR8 shRNA Plasmid (h): sc-78490-SH, ACTR8 shRNA Plasmid (m): sc-140849-SH. ACTR8 shRNA (h) Lentiviral Particles: sc-78490-V and ACTR8 shRNA (m) Lentiviral Particles: sc-140849-V.

Molecular Weight of ACTR8: 70 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.

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.

PROTOCOLS

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