

# ACTR10 (N-13): sc-104807

## BACKGROUND

ACTR10 (actin-related protein 10), also known as ARP11 or HARP11, is a 417 amino acid protein that localizes to the cytoplasm and the cytoskeleton and belongs to the actin family. The gene that encodes ACTR10 maps to human chromosome 14, which contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is located on chromosome 14 and, when defective, leads to the genetic disorder  $\alpha$ 1-antitrypsin deficiency, a disorder characterized by severe lung complications and liver dysfunction. Notably, the immunoglobulin heavy chain locus is found on chromosome 14 and has been identified as a fusion with the chromosome 19 encoded protein BCL3 in the (14;19) translocations found in a variety of B cell malignancies.

## CHROMOSOMAL LOCATION

Genetic locus: ACTR10 (human) mapping to 14q23.1; Actr10 (mouse) mapping to 12 C3.

## SOURCE

ACTR10 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ACTR10 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104807 P, (100  $\mu$ g 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

ACTR10 (N-13) is recommended for detection of ACTR10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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); non cross-reactive with family members ACTR5, ACTR6 or ACTR8.

ACTR10 (N-13) is also recommended for detection of ACTR10 in additional species, including bovine.

Suitable for use as control antibody for ACTR10 siRNA (h): sc-92136, ACTR10 siRNA (m): sc-140846, ACTR10 shRNA Plasmid (h): sc-92136-SH, ACTR10 shRNA Plasmid (m): sc-140846-SH, ACTR10 shRNA (h) Lentiviral Particles: sc-92136-V and ACTR10 shRNA (m) Lentiviral Particles: sc-140846-V.

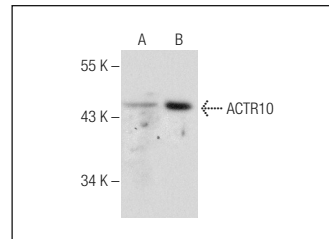
Molecular Weight of ACTR10: 46 kDa.

Positive Controls: ACTR10 (m): 293T Lysate: sc-118230.

## 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



ACTR10 (N-13): sc-104807. Western blot analysis of ACTR10 expression in non-transfected: sc-117752 (A) and mouse ACTR10 transfected: sc-118230 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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Try **ACTR10 (E-6): sc-515293**, our highly recommended monoclonal alternative to ACTR10 (N-13).