# ACTR5 (D-10): sc-515343



The Power to Question

### **BACKGROUND**

ACTR5 (Actin-related protein 5), also known as ARP5 or INO80M, is a 607 amino acid protein that belongs to the Actin family. Functioning as a component of the INO80 chromatin remodeling complex, ACTR5 interacts with a variety of other Actin-related proteins and, via these interactions, is thought to be involved in transcriptional regulation events. The gene encoding ACTR5 maps to chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome.

#### **REFERENCES**

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- van Attikum, H., et al. 2004. Recruitment of the IN080 complex by H2A phosphorylation links ATP-dependent chromatin remodeling with DNA double-strand break repair. Cell 119: 777-788.
- Jin, J., et al. 2005. A mammalian chromatin remodeling complex with similarities to the yeast INO80 complex. J. Biol. Chem. 280: 41207-41212.
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#### **CHROMOSOMAL LOCATION**

Genetic locus: ACTR5 (human) mapping to 20q11.23.

## SOURCE

ACTR5 (D-10) is a mouse monoclonal antibody raised against amino acids 49-110 mapping near the N-terminus of ACTR5 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **STORAGE**

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

### **APPLICATIONS**

ACTR5 (D-10) is recommended for detection of ACTR5 of human origin by Western Blotting (starting dilution 1:100, 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)

Suitable for use as control antibody for ACTR5 siRNA (h): sc-72442, ACTR5 shRNA Plasmid (h): sc-72442-SH and ACTR5 shRNA (h) Lentiviral Particles: sc-72442-V.

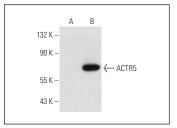
Molecular Weight of ACTR5: 68 kDa.

Positive Controls: ACTR5 (h): 293T Lysate: sc-114374.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker  $^{\text{TM}}$  Molecular Weight Standards: sc-2035, UltraCruz Blocking Reagent: sc-516214 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 m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz Mounting Medium: sc-24941 or UltraCruz Hard-set Mounting Medium: sc-359850.

### DATA



ACTR5 (D-10): sc-515343. Western blot analysis of ACTR5 expression in non-transfected: sc-117752 (A) and human ACTR5 transfected: sc-114374 (B) 293T whole cell lysates.

## **RESEARCH USE**

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

#### **PROTOCOLS**

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