

ANKRD10 (Y-16): sc-83976

BACKGROUND

ANKRD10 (ankyrin repeat domain-containing protein 10) is a 420 amino acid protein that contains 4 Ankyrin repeats and is expressed as 2 alternatively spliced isoforms. The gene encoding ANKRD10 maps to chromosome 13. Comprising nearly 4% of the human genome, chromosome 13 contains around 114 million base pairs and encodes over 400 genes. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

- Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
- O'Reilly, M.K., et al. 2006. *In vitro* evidence for the dual function of Alg2 and Alg11: essential mannosyltransferases in N-linked glycoprotein biosynthesis. *Biochemistry* 45: 9593-9603.
- Rohozinski, J., et al. 2006. UTP14c is a recently acquired retrogene associated with spermatogenesis and fertility in man. *Biol. Reprod.* 74: 644-651.
- Bugge, M., et al. 2007. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
- Hassler, M., et al. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. *Mol. Cell* 28: 371-385.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD10 (human) mapping to 13q34; Ankrd10 (mouse) mapping to 8 A1.1.

SOURCE

ANKRD10 (Y-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ANKRD10 of human 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-83976 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.

PROTOCOLS

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

APPLICATIONS

ANKRD10 (Y-16) is recommended for detection of ANKRD10 of mouse, rat and human 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ANKRD10 (Y-16) is also recommended for detection of ANKRD10 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ANKRD10 siRNA (h): sc-105063, ANKRD10 siRNA (m): sc-141073, ANKRD10 shRNA Plasmid (h): sc-105063-SH, ANKRD10 shRNA Plasmid (m): sc-141073-SH, ANKRD10 shRNA (h) Lentiviral Particles: sc-105063-V and ANKRD10 shRNA (m) Lentiviral Particles: sc-141073-V.

Molecular Weight (predicted) of ANKRD10: 45 kDa.

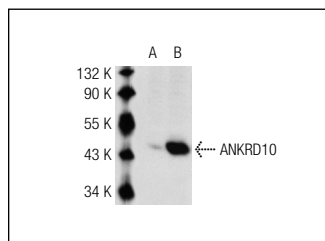
Molecular Weight (observed) of ANKRD10: 42 kDa.

Positive Controls: ANKRD10 (m): 293T Lysate: sc-118404 or HeLa whole cell lysate: sc-2200.

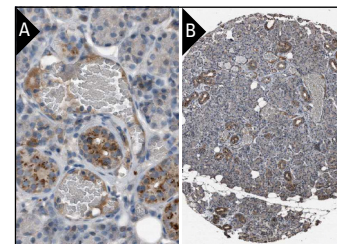
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ANKRD10 (Y-16): sc-83976. Western blot analysis of ANKRD10 expression in non-transfected: sc-117752 (A) and mouse ANKRD10 transfected: sc-118404 (B) 293T whole cell lysates.



ANKRD10 (Y-16): sc-83976. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland showing granular/cytoplasmic staining of ducts at high (A) and low (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

RESEARCH USE

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