

Coronin 7 (E-15): sc-164099

BACKGROUND

Members of the Coronin family are involved in several cellular processes, including cell cycle progression, apoptosis, cytokinesis and gene regulation. Coronin 7, also known as CORO7, crn7 or POD1, is a 925 amino acid protein that predominantly localizes to cytosol. Coronin 7 is occasionally found on vesicle-like cytoplasmic structures of the Golgi apparatus membrane, where it is involved in Golgi complex protein export and morphology. A member of the evolutionarily conserved WD repeat Coronin family, Coronin 7 contains eight WD repeats and exists as two alternatively spliced isoforms that are encoded by a gene located on human chromosome 16p13.3. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

- Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. *Clin. Genet.* 23: 318-320.
- Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. *Am. J. Hum. Genet.* 52: 249-254.
- Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
- Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.
- Rybakin, V., et al. 2004. Coronin 7, the mammalian POD-1 homologue, localizes to the Golgi apparatus. *FEBS Lett.* 573: 161-167.
- Mathew, C.G. and Lewis, C.M. 2004. Genetics of inflammatory bowel disease: progress and prospects. *Hum. Mol. Genet.* 13: R161-R168.

CHROMOSOMAL LOCATION

Genetic locus: CORO7 (human) mapping to 16p13.3; Coro7 (mouse) mapping to 16 A1.

SOURCE

Coronin 7 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Coronin 7 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-164099 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Coronin 7 (E-15) is recommended for detection of Coronin 7 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Coronin family members.

Coronin 7 (E-15) is also recommended for detection of Coronin 7 in additional species, including bovine and porcine.

Suitable for use as control antibody for Coronin 7 siRNA (h): sc-93115, Coronin 7 siRNA (m): sc-142520, Coronin 7 shRNA Plasmid (h): sc-93115-SH, Coronin 7 shRNA Plasmid (m): sc-142520-SH, Coronin 7 shRNA (h) Lentiviral Particles: sc-93115-V and Coronin 7 shRNA (m) Lentiviral Particles: sc-142520-V.

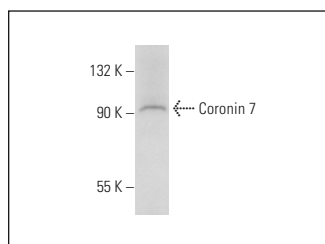
Molecular Weight of Coronin 7: 100 kDa.

Positive Controls: human liver extract: sc-363766.

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



Coronin 7 (E-15): sc-164099. Western blot analysis of Coronin 7 expression in human liver tissue extract.

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.