

# CCDC122 (N-15): sc-84047



The Power to Question

## BACKGROUND

CCDC122 (coiled-coil domain-containing protein 122) is a 273 amino acid protein that is expressed as two alternatively spliced isoforms and is encoded by a gene which maps to human 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., Matthews, L.H., Burton, J., Ashurst, J.L., Howe, K.L., Ashcroft, K.J., Beare, D.M., Burford, D.C., Hunt, S.E., Griffiths-Jones, S., Jones, M.C., Keenan, S.J., Oliver, K, et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
- O'Reilly, M.K., Zhang, G. and Imperiali, B. 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., Lamb, D.J. and Bishop, C.E. 2006. UTP14c is a recently acquired retrogene associated with spermatogenesis and fertility in man. *Biol. Reprod.* 74: 644-651.
- Bugge, M., Collins, A., Hertz, J.M., Eiberg, H., Lundsteen, C., Brandt, C.A., Bak, M., Hansen, C., Delozier, C.D., Lespinasse, J., Tranebjaerg, L., Hahnemann, J.M., Rasmussen, K., Bruun-Petersen, G., Duprez, L., Tommerup, N. and Petersen, M.B. 2007. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
- Hall, H.E., Chan, E.R., Collins, A., Judis, L., Shirley, S., Surti, U., Hoffner, L., Cockwell, A.E., Jacobs, P.A. and Hassold, T.J. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143: 2242-2248.
- Hassler, M., Singh, S., Yue, W.W., Luczynski, M., Lakbir, R., Sanchez-Sanchez, F., Bader, T., Pearl, L.H. and Mitnacht, S. 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: CCDC122 (human) mapping to 13q14.11.

## SOURCE

CCDC122 (N-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of CCDC122 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-84047 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CCDC122 (N-15) is recommended for detection of CCDC122 of 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).

Suitable for use as control antibody for CCDC122 siRNA (h): sc-105183, CCDC122 shRNA Plasmid (h): sc-105183-SH and CCDC122 shRNA (h) Lentiviral Particles: sc-105183-V.

Molecular Weight of CCDC122 (predicted): 32 kDa.

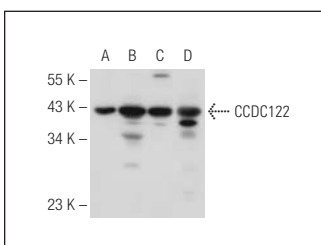
Molecular Weight of CCDC122 (observed): 43 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, HOS cell lysate: sc-2275 or T24 cell lysate: sc-2292.

## 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.

## DATA



CCDC122 (N-15): sc-84047. Western blot analysis of CCDC122 expression in HEK293 (A), T24 (B), CCRF-CEM (C) and HOS (D) whole cell lysates.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.