

# C17orf28 (S-14): sc-160185

## BACKGROUND

C17orf28 (chromosome 17 open reading frame 28) is a 788 amino acid multi-pass membrane protein that is expressed in heart, skeletal muscle, colon, spleen, kidney, liver, small intestine and lung. C17orf28 may be involved in the development of cancers in a broad range of tissues. Existing as three alternatively spliced isoforms, C17orf28 is encoded by a gene mapping to human chromosome 17, which makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes. Chromosome 17 is also linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

## REFERENCES

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4. Dann, R.B., Kelley, J.L. and Zorn, K.K. 2007. Strategies for ovarian cancer prevention. *Obstet. Gynecol. Clin. North Am.* 34: 667-686.
5. Farrell, C.J. and Plotkin, S.R. 2007. Genetic causes of brain tumors: neurofibromatosis, tuberous sclerosis, von Hippel-Lindau, and other syndromes. *Neurol. Clin.* 25: 925-946.
6. Suela, J., Largo, C., Ferreira, B., Alvarez, S., Robledo, M., González-Neira, A., Calasanz, M.J. and Cigudosa, J.C. 2007. Neurofibromatosis 1, and not TP53, seems to be the main target of chromosome 17 deletions in *de novo* acute myeloid leukemia. *J. Clin. Oncol.* 25: 1151-1152.

## CHROMOSOMAL LOCATION

Genetic locus: HID1 (human) mapping to 17q25.1; Hid1 (mouse) mapping to 11 E2.

## SOURCE

C17orf28 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C17orf28 of human origin.

## RESEARCH USE

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

## 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-160185 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C17orf28 (S-14) is recommended for detection of C17orf28 of human origin and C630004H02Rik of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 C17orf family members.

C17orf28 (S-14) is also recommended for detection of C17orf28 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for C17orf28 siRNA (h): sc-94010, C630004H02Rik siRNA (m): sc-141919, C17orf28 shRNA Plasmid (h): sc-94010-SH, C630004H02Rik shRNA Plasmid (m): sc-141919-SH, C17orf28 shRNA (h) Lentiviral Particles: sc-94010-V and C630004H02Rik shRNA (m) Lentiviral Particles: sc-141919-V.

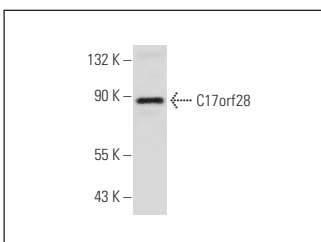
Molecular Weight of C17orf28 isoforms 1/2/3: 89/88/63 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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) 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



C17orf28 (S-14): sc-160185. Western blot analysis of C17orf28 expression in HeLa whole cell lysate.

## STORAGE

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