# C10orf35 (P-12): sc-163772



The Power to Question

## **BACKGROUND**

C10orf35 (chromosome 10 open reading frame 35) is a 121 amino acid single-pass membrane protein encoded by a gene that maps to human chromosome 10q21.3. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

## **REFERENCES**

- Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. Nat. Genet. 8: 275-279.
- Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. Cytogenet. Cell Genet. 90: 1-12.
- 3. Gilbert, F. 2001. Chromosome 10. Genet, Test. 5: 69-82.
- Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
- Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
- Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. Am. J. Surg. Pathol. 32: 1258-1264.

# CHROMOSOMAL LOCATION

Genetic locus: C10orf35 (human) mapping to 10q21.3; 2010107G23Rik (mouse) mapping to 10 B4.

## **SOURCE**

C10orf35 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C10orf35 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163772 P, (100  $\mu g$  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.

#### **APPLICATIONS**

C10orf35 (P-12) is recommended for detection of C10orf35 of human origin, 2010107G23Rik of mouse origin and RGD1305587 of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 C10orf family members.

C10orf35 (P-12) is also recommended for detection of C10orf35 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C10orf35 siRNA (h): sc-90525, 2010107G23Rik siRNA (m): sc-108601, C10orf35 shRNA Plasmid (h): sc-90525-SH, 2010107G23Rik shRNA Plasmid (m): sc-108601-SH, C10orf35 shRNA (h) Lentiviral Particles: sc-90525-V and 2010107G23Rik shRNA (m) Lentiviral Particles: sc-108601-V.

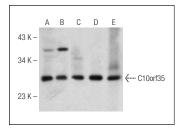
Molecular Weight of C10orf35: 13 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, DU 145 whole cell lysate: sc-2268 or Hep G2 whole cell lysate: sc-2227.

#### **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



C10orf35 (P-12): sc-163772. Western blot analysis of C10orf35 expression in MCF7 (A), DU 145 (B), Hep G2 (C) and SK-N-SH (D) whole cell lysates and mouse brain tissue extract (E).

#### **RESEARCH USE**

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