

C6orf165 (D-14): sc-167351

BACKGROUND

Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyrria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6. The C6orf165 gene product has been provisionally designated C6orf165 pending further characterization.

REFERENCES

- Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
- Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. *Am. J. Med. Genet. A* 130A: 160-164.
- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.
- Safadi, S.S., et al. 2007. A disease state mutation unfolds the parkin ubiquitin-like domain. *Biochemistry* 46: 14162-14169.
- Olsson, K.S., et al. 2007. The HLA-A1-B8 haplotype hitchhiking with the hemochromatosis mutation: does it affect the phenotype? *Eur. J. Haematol.* 79: 429-434.
- Park, E., et al. 2007. Modulation of parkin gene expression in noradrenergic neuronal cells. *Int. J. Dev. Neurosci.* 25: 491-497.
- Batts, K.P. 2007. Iron overload syndromes and the liver. *Mod. Pathol.* 20 Suppl. 1: S31-S39.
- Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer* 47: 159-164.

CHROMOSOMAL LOCATION

Genetic locus: C6orf165 (human) mapping to 6q15; 1700003M02Rik (mouse) mapping to 4 A5.

SOURCE

C6orf165 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of C6orf165 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-167351 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C6orf165 (D-14) is recommended for detection of C6orf165 of human origin, 1700003M02Rik of mouse origin and RGD1310641 of rat 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 C6orf family members.

C6orf165 (D-14) is also recommended for detection of C6orf165 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C6orf165 siRNA (h): sc-95327, 1700003M02Rik siRNA (m): sc-108281, C6orf165 shRNA Plasmid (h): sc-95327-SH, 1700003M02Rik shRNA Plasmid (m): sc-108281-SH, C6orf165 shRNA (h) Lentiviral Particles: sc-95327-V and 1700003M02Rik shRNA (m) Lentiviral Particles: sc-108281-V.

Molecular Weight of C6orf165: 71 kDa.

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.

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.