

PTCHD4 (C-15): sc-139478

BACKGROUND

PTCHD4 (patched domain-containing protein 4), also known as C6orf138, is an 846 amino acid multi-pass membrane protein that belongs to the patched, Smo and Hhip antibodies. PTCHD4 is glycosylated at asparagine 762 and is encoded by a gene that maps to human chromosome 6. 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. Porphyria 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PTCHD4 (human) mapping to 6p12.3; Ptchd4 (mouse) mapping to 17 B3.

SOURCE

PTCHD4 (C-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of PTCHD4 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-139478 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PTCHD4 (C-15) is recommended for detection of PTCHD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PTCHD4 (C-15) is also recommended for detection of PTCHD4 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PTCHD4 siRNA (h): sc-95224, Ptchd4 siRNA (m): sc-148773, PTCHD4 shRNA Plasmid (h): sc-95224-SH, Ptchd4 shRNA Plasmid (m): sc-148773-SH, PTCHD4 shRNA (h) Lentiviral Particles: sc-95224-V and Ptchd4shRNA (m) Lentiviral Particles: sc-148773-V.

Molecular Weight of PTCHD4: 96 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.