

PTCHD3 (C-12): sc-165307

BACKGROUND

PTCHD3 (patched domain-containing protein 3), also known as PTR (patched-related protein), is a 767 amino acid multi-pass membrane protein that localizes to the midpiece of the sperm tail, where it is implicated in sperm function and development. A member of the patched family, PTCHD3 contains one SSD (sterol-sensing) domain and is encoded by a gene that maps to human chromosome 10p12.1. 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, non-syndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

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CHROMOSOMAL LOCATION

Genetic locus: PTCHD3 (human) mapping to 10p12.1; Ptchd3 (mouse) mapping to 11 E2.

SOURCE

PTCHD3 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PTCHD3 of human origin.

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-165307 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PTCHD3 (C-12) is recommended for detection of PTCHD3 of mouse, rat and human 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 PTCHD1 or PTCHD2.

PTCHD3 (C-12) is also recommended for detection of PTCHD3 in additional species, including equine and bovine.

Suitable for use as control antibody for PTCHD3 siRNA (h): sc-90362, PTCHD3 siRNA (m): sc-152576, PTCHD3 shRNA Plasmid (h): sc-90362-SH, PTCHD3 shRNA Plasmid (m): sc-152576-SH, PTCHD3 shRNA (h) Lentiviral Particles: sc-90362-V and PTCHD3 shRNA (m) Lentiviral Particles: sc-152576-V.

Molecular Weight of PTCHD3: 87 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.

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.