# Chibby 3 (T-19): sc-246283



The Power to Question

# **BACKGROUND**

Chibby, also known as cytosolic leucine-rich protein or PIGEA-14, is a 126 amino acid highly conserved protein that inhibits  $\beta$ -catenin-mediated transcriptional activation by competing with LEF-1 to bind  $\beta$ -catenin. Chibby may also play a role in the regulation of the intracellular location of Polycystin-2 and other intracellular proteins. Acting as a homodimer, Chibby is subcellularly localized to the nucleus and Golgi apparatus within the *trans*-Golgi network. Interaction with 14-3-3 results in the sequestration of Chibby to the cytoplasm and the formation of a stable complex with  $\beta$ -catenin, thereby facilitating nuclear export of  $\beta$ -catenin. Though widely expressed, Chibby is found at highest levels in skeletal muscle, heart, placenta and kidney. Down-regulation of Chibby is observed in thyroid and metastatic uterine tumors, suggesting that the gene encoding Chibby may function as a tumor suppressor. Chibby 3 is a 242 amino acid protein that belongs to the Chibby family.

# **REFERENCES**

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- 4. Hidaka, S., et al. 2004. PIGEA-14, a novel coiled-coil protein affecting the intracellular distribution of polycystin-2. J. Biol. Chem. 279: 35009-35016.
- 5. Jung, Y., et al. 2006. TC1 (C8orf4) enhances the Wnt/β-catenin pathway by relieving antagonistic activity of Chibby. Cancer Res. 66: 723-728.
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- 7. Li, F.Q., et al. 2007. Chibby promotes adipocyte differentiation through inhibition of  $\beta$ -catenin signaling. Mol. Cell. Biol. 27: 4347-4354.
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# CHROMOSOMAL LOCATION

Genetic locus: CBY3 (human) mapping to 5q35.3.

# SOURCE

Chibby 3 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Chibby 3 of human origin.

# **PRODUCT**

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

Blocking peptide available for competition studies, sc-246283 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Chibby 3 (T-19) is recommended for detection of Chibby 3 of human 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 Chibby.

Suitable for use as control antibody for Chibby 3 siRNA (h): sc-91954, Chibby 3 shRNA Plasmid (h): sc-91954-SH and Chibby 3 shRNA (h) Lentiviral Particles: sc-91954-V.

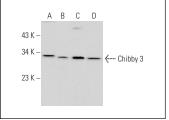
Molecular Weight of Chibby 3: 27 kDa.

Positive Controls: human testis extract: sc-363781, Jurkat whole cell lysate: sc-2204 or human liver extract: sc-363766.

# **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**



Chibby 3 (T-19): sc-246283. Western blot analysis of Chibby 3 expression in Jurkat whole cell lysate ( $\bf A$ ) and human liver ( $\bf B$ ), human heart ( $\bf C$ ) and human testis ( $\bf D$ ) tissue extracts.

#### **STORAGE**

Store at 4° C, \*\*D0 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.