

Pygopus 2 (A-17): sc-74876

BACKGROUND

Pygopus 2, also known as PYG02, is a 406 amino acid protein that is the human homolog of the *Drosophila* Pygopus protein. Localized to the nucleus, Pygopus 2 contains one PHD finger that interacts with the homology domain of the Wnt signaling protein Bcl-9. This interaction joins Pygopus 2 with the β -catenin/TCF complex (a crucial complex in Wnt signaling), thereby allowing β -catenin to transcriptionally activate Wnt target genes. Association of Pygopus 2 with proteins involved in the Wnt signaling pathway is thought to regulate proper signal transduction, as absence of the Pygopus 2/ β -catenin interaction may play a role in development of B cell malignancies. In addition, Pygopus 2 expression is upregulated in and required for the growth of breast cancer cells, suggesting a crucial role in carcinogenesis.

CHROMOSOMAL LOCATION

Genetic locus: PYG02 (human) mapping to 1q21.3; Pygo2 (mouse) mapping to 3 F1.

SOURCE

Pygopus 2 (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Pygopus 2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-74876 P, (100 μ 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

Pygopus 2 (A-17) is recommended for detection of Pygopus 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Pygopus 2 (A-17) is also recommended for detection of Pygopus 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Pygopus 2 siRNA (h): sc-76303, Pygopus 2 siRNA (m): sc-76304, Pygopus 2 shRNA Plasmid (h): sc-76303-SH, Pygopus 2 shRNA Plasmid (m): sc-76304-SH, Pygopus 2 shRNA (h) Lentiviral Particles: sc-76303-V and Pygopus 2 shRNA (m) Lentiviral Particles: sc-76304-V.

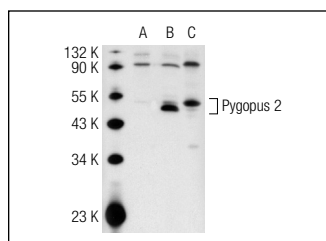
Molecular Weight of Pygopus 2: 42 kDa.

Positive Controls: JAR cell lysate: sc-2276 or Pygopus 2 (m2): 293T Lysate: sc-122857.

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



Pygopus 2 (A-17): sc-74876. Western blot analysis of Pygopus 2 expression in non-transfected 293T: sc-117752 (A), mouse Pygopus 2 transfected 293T: sc-122857 (B) and JAR (C) whole cell lysates.

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.


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Try **Pygopus 2 (B-12): sc-390506** or **Pygopus 2 (B-8): sc-390528**, our highly recommended monoclonal alternatives to Pygopus 2 (A-17).