**BACKGROUND**

Pygopus 2, also known as PYGO2, 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 and required for the growth of breast cancer cells, suggesting a crucial role in carcinogenesis.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PYGO2 (human) mapping to 1q21.3; Pygo2 (mouse) mapping to 3 F1.

**SOURCE**

Pygopus 2 (B-4) is a mouse monoclonal antibody raised against amino acids 127-339 mapping within an internal region of Pygopus 2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**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 for detailed protocols and support products.

**APPLICATIONS**

Pygopus 2 (B-4) is recommended for detection of Pygopus 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg 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).

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 siRNA (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: HeLa whole cell lysate: sc-2200, SH-SY5Y cell lysate: sc-3812 or EOC 20 whole cell lysate: sc-364187.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

For research use only, not for use in diagnostic procedures.

![Western blot analysis of Pygopus 2 expression in various cell lines and tissue extracts.](image1)

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.