

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pygopus-2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human Pygopus-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Pygopus-2 Met160-Glu336 Accession # Q9BRQ0
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

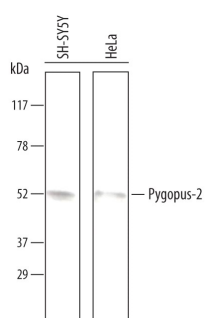
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	3-15 µg/mL	See Below

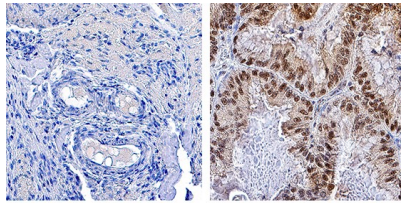
DATA

Western Blot



Detection of Human Pygopus-2 by Western Blot.
Western blot shows lysates of SH-SY5Y human neuroblastoma cell line and HeLa human cervical epithelial carcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Goat Anti-Human Pygopus-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3616) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Pygopus-2 at approximately 53 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

Immunohistochemistry



Pygopus-2 in Human Ovary and Human Ovarian Cancer Tissue. Pygopus-2 was detected in immersion fixed paraffin-embedded sections of normal human ovary (left panel) and ovarian cancer tissue (right panel) using Goat Anti-Human Pygopus-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3616) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Pygopus-2 is a 41 kDa nuclear protein that functions as a transcriptional co-activator in the Wnt signaling pathway. Human Pygopus-2 is synthesized as a 406 amino acid (aa) residue protein that has the conserved N-terminal homology domain (NHD) and the C-terminal PHD (Plant homeodomain) zinc finger. The PHD zinc finger binds Legless/Bcl9, which in turn binds β-Catenin, which recruits TCF/LEF DNA binding proteins. Formulation of the quaternary complex is required for the activation of Wnt-responsive genes. Over the region used for immunization, human Pygopus-2 shares 95% amino acid sequence identity with the mouse protein.