

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PIBF1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PIBF1 Glu19-Ala419 Accession # Q8WXW3
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.

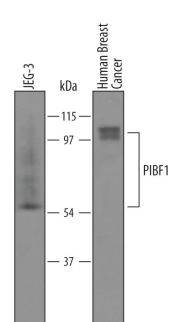
APPLICATIONS

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	5-15 µg/mL	See Below

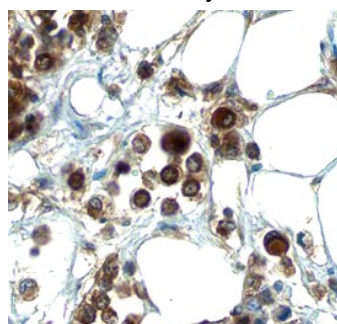
DATA

Western Blot



Detection of Human PIBF1 by Western Blot. Western blot shows lysates of JEG-3 human epithelial choriocarcinoma cell line and human breast cancer tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human PIBF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5559) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). Specific bands were detected for PIBF1 at approximately 98 kDa and 55 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

Immunohistochemistry



PIBF1 in Human Breast Cancer Tissue. PIBF1 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Sheep Anti-Human PIBF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5559) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). 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

PIBF-1 (Progesterone induced blocking factor 1) is a 90-92 kDa progesterone-inducible molecule initially isolated from the lymphocytes of pregnant women. It is produced by lymphocytes plus villous trophoblast cells, and modulates the activity of cytotoxic NK cells. Human PIBF-1 is 757 amino acids (aa) in length. It contains a possible signal sequence (aa 1-26), two Leu-zippers (aa 311-323 and 643-664), two NLSs (aa 282-285 and 567-573), a bZIP sequence (aa 574-614), and an ER retention motif (aa 752-757). PIBF-1 is found in the nucleus, cytoplasm, and circulation, the result of multiple splice variants. SDS-page shows 90 kDa, 80-83 kDa, 48-52 kDa, 34-35 kDa, and 10-12 kDa isoforms. The 90 kDa form is nuclear and full-length, while the 34-35 kDa form is secreted and likely represents aa 1-223 spliced to aa 683-757. There is a 50-55 kDa form that is apparently intracellular, possibly bioactive and likely represents the N-terminus of the molecule. Over aa 19-419, human PIBF-1 shares 88% aa identity with mouse PIBF-1.