

# PIBF1 Antibody

Catalog # ASC11618

# **Product Information**

**Application** WB, IF, E, IHC-P **Primary Accession** Q8WXW3

Other Accession NP\_006337, 5576958
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 89805
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

**Application Notes** PIBF1 antibody can be used for detection of PIBF1 by Western blot at 1 - 2

□g/mL.

## **Additional Information**

**Gene ID** 10464

Other Names Progesterone-induced-blocking factor 1, PIBF1, C13orf24, PIBF

Target/Specificity PIBF1; Multiple isoforms of PIBF1 exists as a result of alternative splicing

event.

**Reconstitution & Storage** PIBF1 antibody can be stored at 4°C for three months and -20°C, stable for up

to one year.

**Precautions** PIBF1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

### **Protein Information**

Name PIBF1

**Synonyms** C13orf24, PIBF

**Function** Plays a role in ciliogenesis.

**Cellular Location** Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.

Cytoplasm. Secreted Note=In progesterone-treated astrocytoma cells a 57 kDa protein and isoform 1 (90 kDa) have been described, both being located in the intracellular medium and secreted. Respective predominant forms are isoform 1 in the intracellular and the 57 kDa protein in the extracellular medium (PubMed:25218441). [Isoform 4]: Secreted Note=Secreted by

progesterone-treated lymphocytes (PubMed:14634107)

#### **Tissue Location**

Expressed at highest levels in testis. Moderate expression is detected in spleen, thymus, prostate, ovary, small intestine, and colon (PubMed:11935316). Expressed in the first trimester pregnancy decidua (PubMed:12516630). Localized to extravillous cytotrophoblast (at protein level). Also found in syncytiotrophoblast and part of the villous cytotrophoblast. Isoform 1 is expressed in first trimester and term villous trophoblast; trophoblast cells can additionally express other isoforms (PubMed:18817979). Overexpressed in solid tumors from stomach and uterus and in cells from ovary, cervical, breast, lymphoma and leukemia cancer (PubMed:25218441).

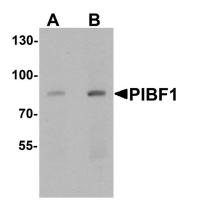
# **Background**

PIBF1 is synthesized during pregnancy in response to progesterone by T lymphocytes. PIBF1 inhibits arachidonic acid release, controls NK activity, and modifies the cytokine balance exerting an anti-abortive effect. It contains a leucine zipper motif, a basic zipper sequence, a PEST sequence, a nuclear localization signal, an ER membrane retention signal and N-glycosylation and phosphorylation sites. PIBF1 is significantly higher in healthy pregnant women than in women at risk for premature pregnancy termination. Full-length PIBF1 is associated with the nucleus and functions as a transcription factor, whereas secretion of shorter forms which may act as cytokines is induced by activation of the cell.

## References

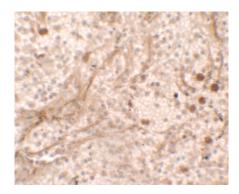
Laskarin G, Tokmadzic VS, Strbo N, et al. Progesterone induced blocking factor (PIBF) mediates progesterone induced suppression of decidual lymphocyte cytotoxicity. Am. J. Reprod. Immunol. 2002; 48:201-9. Lachmann M, Gelbmann D, Kalman E, et al. PIBF (progesterone induced blocking factor) is overexpressed in highly proliferating cells and associated with the centrosome. Int. J. Cancer. 2004; 112:51-60 Polgar B, Kispal G, Lachmann M, et al. Molecular cloning and immunologic characterization of a novel cDNA coding for progesterone-induced blocking factor. J. Immunol. 2003; 171:5956-63. Raghupathy R, Al-Mutawa E, Al-Azemi M, et al. Progesterone-induced blocking factor (PIBF) modulates cytokine production by lymphocytes from women with recurrent miscarriage or preterm delivery. J. Reprod. Immunol. 2009; 80:91-9.

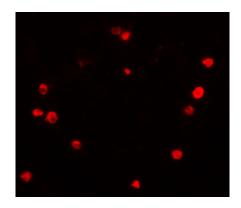
# **Images**



Western blot analysis of PIBF1 in human placenta tissue lysate with PIBF1 antibody at (A) 1 and (B) 2 µg/mL

Immunohistochemistry of PBIF in spleen tissue with PBIF antibody at 5  $\mu$ g/ml.





Immunofluorescence of PBIF in human spleen tissue with PBIF antibody at 20  $\mu\text{g/ml}.$ 

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