

# PIBF (N-15): sc-48266

## BACKGROUND

PIBF (progesterone-induced blocking factor 1) is synthesized during pregnancy in response to progesterone by progesterone receptor-positive T lymphocytes (mostly gamma-delta T cells). In the presence of PIBF, natural killer (NK) cells inhibit the release of perforin from storage granules and therefore fail to lyse target cells. In humans, the amount of cells that express PIBF is significantly higher in healthy pregnant women than in women at risk for premature pregnancy termination. Full-length PIBF is associated with the nucleus, whereas secretion of shorter forms is induced by activation of the cell. Research suggests that PIBF functions as a transcription factor in its full-length form, while smaller forms may act as cytokines. The PIBF gene encodes a deduced hydrophilic 757-amino acid alpha-helical protein with an N-terminal signal sequence, a leucine zipper motif, a basic zipper sequence, a PEST sequence, a nuclear localization signal, an endoplasmic reticulum membrane retention signal, and many presumed N-glycosylation and phosphorylation sites.

## REFERENCES

1. Check, J.H., et al. 1997. Lymphocyte immunotherapy (LI) increases serum levels of progesterone induced blocking factor (PIBF). *Am. J. Reprod. Immunol.* 37: 17-20.
2. Check, J.H., et al. 1997. Expression of an immuno-modulatory protein known as PIBF does not correlate with first trimester spontaneous abortions in progesterone supplemented women. *Am. J. Reprod. Immunol.* 37: 330-334.
3. Laskarin, G., et al. 2002. Progesterone induced blocking factor (PIBF) mediates progesterone induced suppression of decidual lymphocyte cytotoxicity. *Am. J. Reprod. Immunol.* 48: 201-209.
4. Polgar, B., et al. 2003. Molecular cloning and immunologic characterization of a novel cDNA coding for progesterone-induced blocking factor. *J. Immunol.* 171: 5956-5963.

## CHROMOSOMAL LOCATION

Genetic locus: PIBF1 (human) mapping to 13q22.1; Pibf1 (mouse) mapping to 14 E2.2.

## SOURCE

PIBF (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PIBF of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-48266 P, (100 µg 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

PIBF (N-15) is recommended for detection of PIBF of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PIBF (N-15) is also recommended for detection of PIBF in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PIBF siRNA (h): sc-61347, PIBF siRNA (m): sc-61348, PIBF shRNA Plasmid (h): sc-61347-SH, PIBF shRNA Plasmid (m): sc-61348-SH, PIBF shRNA (h) Lentiviral Particles: sc-61347-V and PIBF shRNA (m) Lentiviral Particles: sc-61348-V.

Molecular Weight of full-length PIBF: 89 kDa.

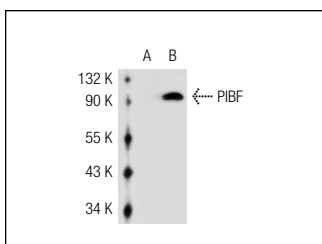
Molecular Weight of PIBF bioactive form: 48 kDa.

Positive Controls: PIBF (h): 293T Lysate: sc-116389, HeLa nuclear extract: sc-2120 or MCF7 whole cell lysate: sc-2206.

## 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) 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



PIBF (N-15): sc-48266. Western blot analysis of PIBF expression in non-transfected: sc-117752 (A) and human PIBF transfected: sc-116389 (B) 293T whole cell lysates.

## RESEARCH USE

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

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Try **PIBF (A-2): sc-376840** or **PIBF (G-10): sc-271504**, our highly recommended monoclonal alternatives to PIBF (N-15).