

---

## PIM1 Rabbit pAb

Catalog Number: bs-3540R

Target Protein: PIM1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1ug/test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Pig, Sheep, Cow, Chicken, Dog, GuineaPig)

Predicted MW: 45 kDa

Entrez Gene: 5292

Swiss Prot: P11309

Source: KLH conjugated synthetic peptide derived from human PIM1: 251-350/404.

Purification: affinity purified by Protein A

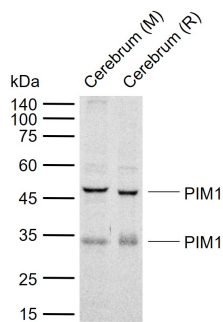
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

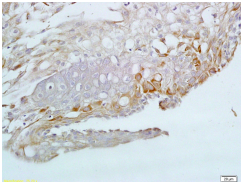
**Background:** PIM1 is a member of the serine/threonine kinase PIM oncogene family. PIM1 has been implicated in lymphomagenesis, cell proliferation, apoptosis, differentiation and tumourigenesis. The PIM1 protein kinase is upregulated in prostate cancer.

The Pim family serine/threonine protein kinases were first identified in studies examining genes targeted for proviral insertion in murine leukemia virus-induced T lymphomas. Increased levels of Pim kinases predispose cells to lymphomagenesis and enhance the activity of mitogenic proteins such as p100, c-Myb, and Cdc25A. In addition, Pim kinases are also involved in modulation of synaptic strength in neurons and anti-apoptotic signaling in hematopoietic progenitor cells. Pim-3, a member of the proto-oncogene Pim family that expresses serine/threonine kinase activity, shares significant homology with Pim-1 serine/threonine protein kinases. Pim-3 may function as a mediator of synaptic plasticity in the brain and is presumably involved in the anti-apoptosis process and cell cycle progression as well as the proliferation of human hepatoma cell lines. The Pim-3 protein is widely expressed, however no expression is observed in the colon, thymus, or small intestine.

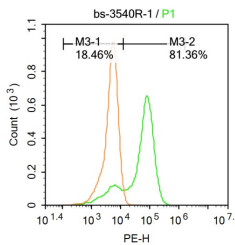
## VALIDATION IMAGES



Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Rat Cerebrum tissue lysates Primary: Anti-PIM1 (bs-3540R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 45 kDa Observed band size: 34,46 kDa



Paraformaldehyde-fixed, paraffin embedded (Rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PIM1) Polyclonal Antibody, Unconjugated (bs-3540R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



U-937 cells were fixed with 4% PFA for 10min at room temperature, permeabilized with 90% ice-cold methanol for 20 min at room temperature, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with PIM1 Antibody(bs-3540R) at 1:100 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2%BSA in PBS, followed by secondary antibody incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).

## PRODUCT SPECIFIC PUBLICATIONS

**[IF=3.174]** Yumeng Cao. et al. PIM1 inhibition attenuated endotoxin-induced acute lung injury through modulating ELK3/ICAM1 axis on pulmonary microvascular endothelial cells. *Inflamm Res.* 2021 Jan;70(1):89-98 IHC ; MOUSE . 33185705