

## PIM2 (Internal) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2477a

### **Specification**

## PIM2 (Internal) Antibody (internal region) - Product Information

Application WB, E
Primary Accession O9P1W9

Other Accession <u>NP\_006866.2</u>, <u>11040</u>

Reactivity
Predicted
Host
Clonality
Concentration
Isotype
Human
Mouse, Dog
Goat
Polyclonal
0.5 mg/ml

Isotype IgG
Calculated MW 34190

# PIM2 (Internal) Antibody (internal region) - Additional Information

#### **Gene ID 11040**

### **Other Names**

Serine/threonine-protein kinase pim-2, 2.7.11.1, Pim-2h, PIM2

#### **Dilution**

WB~~1:1000 E~~N/A

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

PIM2 (Internal) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

### PIM2 (Internal) Antibody (internal region) - Protein Information

#### Name PIM2

# **Function**

Proto-oncogene with serine/threonine kinase activity involved in cell survival and cell proliferation. Exerts its oncogenic activity through: the regulation of MYC transcriptional activity, the regulation of cell cycle progression, the regulation of cap-dependent protein translation and through survival



signaling by phosphorylation of a pro- apoptotic protein, BAD. Phosphorylation of MYC leads to an increase of MYC protein stability and thereby an increase transcriptional activity. The stabilization of MYC exerted by PIM2 might explain partly the strong synergism between these 2 oncogenes in tumorigenesis. Regulates cap-dependent protein translation in a mammalian target of rapamycin complex 1 (mTORC1)-independent manner and in parallel to the PI3K-Akt pathway. Mediates survival signaling through phosphorylation of BAD, which induces release of the anti-apoptotic protein Bcl-X(L)/BCL2L1. Promotes cell survival in response to a variety of proliferative signals via positive regulation of the l-kappa-B kinase/NF-kappa-B cascade; this process requires phosphorylation of MAP3K8/COT. Promotes growth factor-independent proliferation by phosphorylation of cell cycle factors such as CDKN1A and CDKN1B. Involved in the positive regulation of chondrocyte survival and autophagy in the epiphyseal growth plate.

#### **Tissue Location**

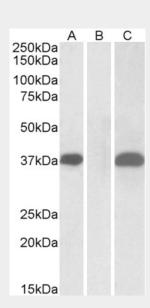
Highly expressed in hematopoietic tissues, in leukemic and lymphoma cell lines, testis, small intestine, colon and colorectal adenocarcinoma cells. Weakly expressed in normal liver, but highly expressed in hepatocellular carcinoma tissues

### PIM2 (Internal) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## PIM2 (Internal) Antibody (internal region) - Images



HEK293 lysate (10ug protein in RIPA buffer) overexpressing Human PIM2 with C-terminal MYC tag probed with AF2477a (1ug/ml) in Lane A and probed with anti-MYC Tag (1/1000) in lane C. Mock-transfected HEK293 probed with AF2477a (1mg/ml) in Lane B. Primary incubations were for 1 hour. Detected by chemiluminescence.





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# PIM2 (Internal) Antibody (internal region) - References

Lymphocyte transformation by Pim-2 is dependent on nuclear factor-kappaB activation. Hammerman PS, Fox CJ, Cinalli RM, Xu A, Wagner JD, Lindsten T, Thompson CB. Cancer Res. 2004 Nov 15;64(22):8341-8. PMID: 15548703