Pim-2 (S-13): sc-26404

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BIOTECHNOLOGY

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BACKGROUND

The Pim-2 gene product (provirus integration site for Moloney murine leukemia virus), is a serine/threonine kinase that is capable of autophosphorylation. Human transcripts for Pim-2 have been detected in hematopoietic lineages as well as leukemic and lymphomic cells (K-562, HL-60, RAJI, SW480, testis, small intestine and colon). Additionally, Pim-2 kinase is found at moderate levels and is distributed evenly throughout the brain. Pim-2 kinase is implicated in tumor phenotypes and may be involved in the formation and preservation of long-term potentiation (LTP), a profuse, activity-dependent enhancement of synaptic efficacy that is implicated in long-term memory.

REFERENCES

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2. Allen, J.D., et al. 1997. Pim-2 transgene induces lymphoid tumors, exhibiting potent synergy with c-Myc. Oncogene 10: 1133-1141.

3. Baytel, D., et al. 1998. The human Pim-2 proto-oncogene and its testicular expression. Biochim. Biophys. Acta 1444: 312-313.

4. Konietzko, U., et al. 1999. Pim kinase expression is induced by LTP stimulation and required for the consolidation of enduring LTP. EMBO J. 18: 3359-3369.

5. Eichmann, A., et al. 2000. Developmental expression of pim kinases suggests functions also outside of the hematopoietic system. Oncogene 19: 1215-1224.

6. Hammerman P.S., et al. 2004. Lymphocyte transformation by Pim-2 is dependent on nuclear factor-κB activation. Cancer Res. 64: 8341-8348.

7. Dai J.M, et al. 2005. Antisense oligodeoxynucleotides targeting the serine/threonine kinase Pim-2 inhibited proliferation of DU-145 cells. Acta Pharmacol. Sin. 26: 364-368.

CHROMOSOMAL LOCATION

Genetic locus: PIM2 (human) mapping to Xp11.23; Pim2 (mouse) mapping to X A1.1.

SOURCE

Pim-2 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Pim-2 of mouse 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-26404 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

Pim-2 (S-13) is recommended for detection of Pim-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and 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).

Suitable for use as control antibody for Pim-2 siRNA (h): sc-39145, Pim-2 siRNA (m): sc-36227, Pim-2 shRNA Plasmid (h): sc-39145-SH, Pim-2 shRNA Plasmid (m): sc-36227-SH, Pim-2 shRNA (h) Lentiviral Particles: sc-39145-V and Pim-2 shRNA (m) Lentiviral Particles: sc-36227-V.

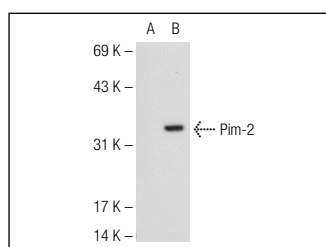Molecular Weight of Pim-2 human short isoform: 34 kDa.

Molecular Weight of Pim-2 mouse short isoform: 34 kDa.

Molecular Weight of Pim-2 mouse medium isoform: 38 kDa.

Molecular Weight of Pim-2 mouse long isoform: 40 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242 or Pim-2 (h4): 293T lysate: sc-111264.

DATA

Pim-2 (S-13): sc-26404. Western blot analysis of Pim-2 expression in non-transfected: sc-117752 (**A**) and human Pim-2 transfected: sc-111264 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
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Try **Pim-2 (1D12): sc-13514** or **Pim-2 (F-4): sc-271893**, our highly recommended monoclonal alternatives to Pim-2 (S-13). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Pim-2 (1D12): sc-13514**.