SANTA CRUZ BIOTECHNOLOGY, INC.

Pim-2 (D-8): sc-271844

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

Pim-2 (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 231-255 within an internal region of Pim-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-271844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Pim-2 (D-8) is recommended for detection of Pim-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Pim-2 (D-8) is also recommended for detection of Pim-2 in additional species, including canine, bovine and porcine.

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.

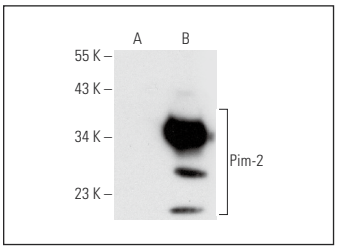
Molecular Weight of Pim-2 mouse long isoform: 40 kDa.

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Pim-2 (D-8): sc-271844. 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.

SELECT PRODUCT CITATIONS

1. Cho, H., et al. 2020. Anti-survival and pro-apoptotic effects of meridianin C derivatives on MV4-11 human acute myeloid leukemia cells. Int. J. Oncol. 56: 368-378.
2. Marino, D., et al. 2022. High ETV6 levels support aggressive B lymphoma cell survival and predict poor outcome in diffuse large B-cell lymphoma patients. Cancers 14: 338.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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

CONJUGATES

See **Pim-2 (1D12): sc-13514** for Pim-2 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.