# pyridoxal phosphatase (B-3): sc-271021



The Power to Question

# **BACKGROUND**

Pyridoxal phosphatase (PLPase) is an autoantigen comprising 296 amino acids. PLPase catalyzes the dephosphorylation of pyridoxal 5'-phosphate (the active form of vitamin B6) and exhibits a high level of expression various parts of the central nervous system, especially the brain. PLPase activity is catalyzed by haloacid dehalogenase (HAD), and it is is the cofactor of both aromatic L-amino acid decarboxylase and glutamate decarboxylase. Autoantibodies against pyridoxal phosphatase show a strong correlation with certain types of cancer.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: PDXP (human) mapping to 22g13.1.

# SOURCE

pyridoxal phosphatase (B-3) is a mouse monoclonal antibody raised against amino acids 158-197 mapping within an internal region of pyridoxal phosphatase of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  IgM kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

pyridoxal phosphatase (B-3) is recommended for detection of pyridoxal phosphatase of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for pyridoxal phosphatase siRNA (h): sc-61425, pyridoxal phosphatase shRNA Plasmid (h): sc-61425-SH and pyridoxal phosphatase shRNA (h) Lentiviral Particles: sc-61425-V.

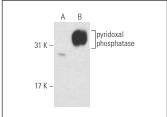
Molecular Weight of pyridoxal phosphatase: 32 kDa.

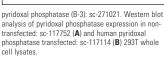
Positive Controls: pyridoxal phosphatase (h): 293T Lysate: sc-117114, Hep G2 cell lysate: sc-2227 or human brain extract: sc-364375.

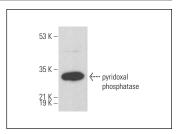
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

# DATA







pyridoxal phosphatase (B-3): sc-271021. Western blot analysis of pyridoxal phosphatase expression in human brain tissue extract.

#### **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.