PN-1 (C-12): sc-365650

BACKGROUND

The serine protease inhibitors (serpins) compose a superfamily of proteins with a diverse set of functions, including the control of blood coagulation, complement activation, programmed cell death and development. Serpins are secreted glycoproteins that contain a stretch of peptide that mimics a true substrate for a corresponding serine protease. Protease nexin-1 (PN-1) is a serpin that inactivates several proteases, including thrombin, urokinase, plasminogen activators (PA) and plasmin. It is involved in tissue remodeling, cellular invasiveness, matrix degradation and tumor growth. PN-1 expression is abundant in the nervous system, where it inhibits thrombin, thereby playing a role in neural injury and repair processes. An imbalance between PN-1 and thrombin may be a contributing factor in the pathology of Alzheimer's disease.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: SERPINE2 (human) mapping to 2q36.1; Serpine2 (mouse) CHROMOSOMAL LOCATION 1 mapping to 1 C4.

SOURCE

PN-1 (C-12) is a mouse monoclonal antibody raised against amino acids 246-314 mapping within an internal region of PN-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PN-1 (C-12) is available conjugated to agarose (sc-365650 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365650 HRP), 200 µg/ml, for WB, IHC(PE) and ELISA; to either phycoerythrin (sc-365650 PE), fluorescein (sc-365650 FITC), Alexa Fluor® 488 (sc-365650 AF488), Alexa Fluor® 546 (sc-365650 AF546), Alexa Fluor® 594 (sc-365650 AF594) or Alexa Fluor® 647 (sc-365650 AF647), 200 µg/ml, for WB (RGB), IF, IHC(PE) and FCM; and to either Alexa Fluor® 680 (sc-365650 AF680) or Alexa Fluor® 790 (sc-365650 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

RESEARCH USE

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

APPLICATIONS

PN-1 (C-12) is recommended for detection of PN-1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:500-1:5000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PN-1 siRNA (h): sc-45254, PN-1 siRNA (m): sc-45255, PN-1 shRNA Plasmid (h): sc-45254-SH, PN-1 shRNA Plasmid (m): sc-45255-SH, PN-1 shRNA (h) Lentiviral Particles: sc-45254-V and PN-1 shRNA (m) Lentiviral Particles: sc-45255-V.

Molecular Weight of PN-1: 44 kDa.

Positive Controls: rat brain extract: sc-2392, Hep G2 cell lysate: sc-2227 or A549 cell lysate: sc-2413.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

PN-1 (C-12): sc-365650. Western blot analysis of PN-1 expression in rat brain tissue extract (A) and Hep G2 (B) and A549 (C) whole cell lysates.

SELECT PRODUCT CITATIONS


STORAGE

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