h-prune (G-17): sc-69180



The Power to Question

BACKGROUND

H-prune, also known as DRES17 (*Drosophila*-related expressed sequence 17) or prune, is a 453 amino acid protein that localizes to the cytoplasm and the nucleus, as well as to the cell junction, and belongs to the prune subfamily of PPase class C proteins. Expressed ubiquitously, h-prune exists as a homoligomer that uses manganese as a cofactor and functions as a phosphodiesterase, effectively catalyzing the conversion of a diphosphate to two free phosphates and playing a role in cell proliferation and cell motility. H-prune is overexpressed in aggressive sarcoma subtypes, such as leiomyosarcomas and malignant fibrous histiocytomas (MFH), suggesting a role in tumor development and metastasis. Multiple isoforms of h-prune exist due to alternative splicing events.

REFERENCES

- 1. Volorio, S., Simon, G., Repetto, M., Cucciardi, M., Banfi, S., Borsani, G., Ballabio, A. and Zollo, M. 1998. Sequencing analysis of forty-eight human image cDNA clones similar to *Drosophila* mutant protein. DNA Seq. 9: 307-315.
- Reymond, A., Volorio, S., Merla, G., Al-Maghtheh, M., Zuffardi, O., Bulfone, A., Ballabio, A. and Zollo, M. 1999. Evidence for interaction between human PRUNE and nm23-H1 NDPKinase. Oncogene 18: 7244-7252.
- 3. Forus, A., D'Angelo, A., Henriksen, J., Merla, G., Maelandsmo, G.M., Flørenes, V.A., Olivieri, S., Bjerkehagen, B., Meza-Zepeda, L.A., del Vecchio Blanco, F., Müller, C., Sanvito, F., Kononen, J., Nesland, J.M., et al. 2001. Amplification and overexpression of PRUNE in human sarcomas and breast carcinomas—a possible mechanism for altering the nm23-H1 activity. Oncogene 20: 6881-6890.

CHROMOSOMAL LOCATION

Genetic locus: PRUNE (human) mapping to 1q21.3; Prune (mouse) mapping to 3 F2.1.

SOURCE

h-prune (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of h-prune of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69180 P, (100 μ g 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.

PROTOCOLS

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

APPLICATIONS

h-prune (G-17) is recommended for detection of h-prune of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

h-prune (G-17) is also recommended for detection of h-prune in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for h-prune siRNA (h): sc-75218, h-prune siRNA (m): sc-75219, h-prune shRNA Plasmid (h): sc-75218-SH, h-prune shRNA Plasmid (m): sc-75219-SH, h-prune shRNA (h) Lentiviral Particles: sc-75218-V and h-prune shRNA (m) Lentiviral Particles: sc-75219-V.

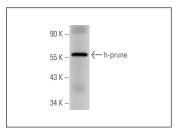
Molecular Weight of h-prune: 50 kDa.

Positive Controls: human liver extract: sc-363766.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



h-prune (G-17): sc-69180. Western blot analysis of h-prune expression in human liver tissue extract.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try **h-prune (F-5): sc-393318**, our highly recommended monoclonal alternative to h-prune (G-17).