

PTRH2 (G-15): sc-324237

BACKGROUND

PTRH2 (peptidyl-tRNA hydrolase 2), also known as BIT1 (Bcl-2 inhibitor of transcription 1), is a 179 amino acid mitochondrial protein. During apoptosis, PTRH2 is released from the mitochondria to the cytoplasm. Once in the cytoplasm, PTRH2 regulates the function of two transcriptional regulators, TLE5 and TLE1, thereby promoting caspase-independent cell death. It is also believed that the natural substrate for PTRH2 may be peptidyl-tRNAs, which leave the ribosomes during protein synthesis. PTRH2 is a monomer that contains a N-terminal mitochondrial localization signal and a C-terminal UPF0099 domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PTRH2 (human) mapping to 17q23.1; Pth2 (mouse) mapping to 11 C.

SOURCE

PTRH2 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PTRH2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-324237 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PTRH2 (G-15) is recommended for detection of PTRH2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with PTRH1.

PTRH2 (G-15) is also recommended for detection of PTRH2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PTRH2 siRNA (h): sc-76295, PTRH2 siRNA (m): sc-76296, PTRH2 shRNA Plasmid (h): sc-76295-SH, PTRH2 shRNA Plasmid (m): sc-76296-SH, PTRH2 shRNA (h) Lentiviral Particles: sc-76295-V and PTRH2 shRNA (m) Lentiviral Particles: sc-76296-V.

Molecular Weight of PTRH2: 20 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.