SANTA CRUZ BIOTECHNOLOGY, INC.

G1P3 (H-84): sc-292249

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

G1P3, also known as interferon α-inducible protein 6 (IFI6) or interferon-induced protein 6-16, is a 130 amino acid member of the IFI6 family of proteins. Localized to the mitochondria, G1P3 is a multi-pass membrane protein that is induced by IFN-2β. G1P3 has been shown to play a major role in the apoptosis pathway. Specifically, G1P3 acts as a cell survival protein by inhibiting caspase-3 activity, which antagonizes apoptosis. G1P3 has been implicated in tumorigenesis and is the subject of therapeutic studies, as reducing G1P3-mediated antiapoptotic signals could suggest improved therapies for myeloma or other malignancies.

REFERENCES

1. Parker, N., et al. 2004. Identification of a novel gene family that includes the interferon-inducible human genes 6-16 and ISG12. BMC Genomics 5: 8.
2. Tahara, E., et al. 2005. G1P3, an interferon inducible gene 6-16, is expressed in gastric cancers and inhibits mitochondrial-mediated apoptosis in gastric cancer cell line TMK-1 cell. Cancer Immunol. Immunother. 54: 729-740.
3. Joo, S.S., et al. 2006. Interferon signal transduction of biphenyl dimethyl dicarboxylate/amantadine and anti-HBV activity in Hep G2 2.2.15. Arch. Pharm. Res. 29: 405-411.
4. Särkijärvi, S., et al. 2006. Gene expression profiles in Finnish twins with multiple sclerosis. BMC Med. Genet. 7: 11.
5. Gray, C.A., et al. 2006. Identification of endometrial genes regulated by early pregnancy, progesterone, and interferon τ in the ovine uterus. Biol. Reprod. 74: 383-394.
6. Deng, Y.J., et al. 2006. Gene profiling involved in immature $CD4^+$ T lymphocyte responsible for systemic lupus erythematosus. Mol. Immunol. 43: 1497-1507.

CHROMOSOMAL LOCATION

Genetic locus: IFI6 (human) mapping to 1p35.3.

SOURCE

G1P3 (H-84) is a rabbit polyclonal antibody raised against amino acids 1-84 mapping at the N-terminus of G1P3 of human origin.

PRODUCT

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

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.

APPLICATIONS

G1P3 (H-84) is recommended for detection of G1P3 of human origin by Western Blotting (starting dilution 1:200, 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).

Suitable for use as control antibody for G1P3 siRNA (h): sc-75074, G1P3 shRNA Plasmid (h): sc-75074-SH and G1P3 shRNA (h) Lentiviral Particles: sc-75074-V.

Molecular Weight of G1P3: 13 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.