



## G1P3 (C-14): sc-82174

### BACKGROUND

G1P3, also known as interferon  $\alpha$ -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- $2\beta$ . 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

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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 HepG2 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  $\tau$  in the ovine uterus. *Biol. Reprod.* 74: 383-394.
6. Deng, Y.J., et al. 2006. Gene profiling involved in immature CD4<sup>+</sup> T lymphocyte responsible for systemic lupus erythematosus. *Mol. Immunol.* 43: 1497-1507.
7. Tsai, M.H., et al. 2007. Gene expression profiling of breast, prostate, and glioma cells following single versus fractionated doses of radiation. *Cancer Res.* 67: 3845-3852.
8. Cheriya, V., et al. 2007. G1P3, an IFN-induced survival factor, antagonizes TRAIL-induced apoptosis in human myeloma cells. *J. Clin. Invest.* 117: 3107-3117.
9. Zhao, D., et al. 2008. Inhibition of G1P3 expression found in the differential display study on respiratory syncytial virus infection. *Virology* 378: 114-121.

### CHROMOSOMAL LOCATION

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

### SOURCE

G1P3 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of G1P3 of human origin.

### STORAGE

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

### PRODUCT

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

Blocking peptide available for competition studies, sc-82174 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

G1P3 (C-14) is recommended for detection of G1P3 of 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).

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 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.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.