# GLIPR1 (8D9): sc-517141



The Power to Question

#### **BACKGROUND**

GLIPR1 (GLI pathogenesis-related 1), also known as GLIPR, RTVP1 or CRISP7, is a 266 amino acid single-pass membrane protein belonging to the cysteine-rich secretory protein (CRISP) family. GLIPR1 also shares similarity with the pathogenesis-related protein (PR) superfamily, and may function as a p53 target gene with tumor suppressor functions. While ubiquitously expressed, GLIPR1 is found at highest levels in heart, lung, kidney, placenta, liver, skeletal muscle and cell lines derived from tumors of the nervous system. GLIPR1 expression is induced by p53 overexpression, exposure to gamma irradiation and doxorubicinis. The gene encoding GLIPR1 maps to human chromosome 12q21.2 and while alternatively spliced isoforms of GLIPR1 are known to exist, not all variants have been characterized.

## **REFERENCES**

- Murphy, E.V., et al. 1995. The human glioma pathogenesis-related protein is structurally related to plant pathogenesis-related proteins and its gene is expressed specifically in brain tumors. Gene 159: 131-135.
- Rich, T., et al. 1996. RTVP-1, a novel human gene with sequence similarity to genes of diverse species, is expressed in tumor cell lines of glial but not neuronal origin. Gene 180: 125-130.
- 3. Ren, C., et al. 2002. mRTVP-1, a novel p53 target gene with proapoptotic activities. Mol. Cell. Biol. 22: 3345-3357.
- Rosenzweig, T., et al. 2006. Related to testes-specific, vespid, and pathogenesis protein-1 (RTVP-1) is overexpressed in gliomas and regulates the growth, survival, and invasion of glioma cells. Cancer Res. 66: 4139-4148.
- 5. Ren, C., et al. 2006. Identification and characterization of RTVP1/GLIPR1-like genes, a novel p53 target gene cluster. Genomics 88: 163-172.
- Xiang, C., et al. 2007. Cloning and characterization of human RTVP-1b, a novel splice variant of RTVP-1 in glioma cells. Biochem. Biophys. Res. Commun. 362: 612-618.

## CHROMOSOMAL LOCATION

Genetic locus: GLIPR1 (human) mapping to 12g21.2.

# **SOURCE**

GLIPR1 (8D9) is a mouse monoclonal antibody raised against amino acids 23-99 representing partial length GLIPR1 of human origin.

# **PRODUCT**

Each vial contains 100  $\mu g \, lg G_{2a}$  kappa light chain 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.

## **PROTOCOLS**

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

#### **APPLICATIONS**

GLIPR1 (8D9) is recommended for detection of GLIPR1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GLIPR1 siRNA (h): sc-96218, GLIPR1 shRNA Plasmid (h): sc-96218-SH and GLIPR1 shRNA (h) Lentiviral Particles: sc-96218-V.

Molecular Weight of GLIPR1: 30 kDa.

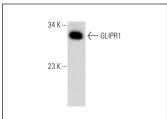
Positive Controls: HeLa whole cell lysate: sc-2200 or T98G cell lysate: sc-2294.

#### **RECOMMENDED SUPPORT REAGENTS**

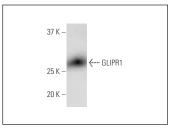
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-lgGκ BP-HRP: sc-516102 or m-lgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

### DATA







GLIPR1 (8D9): sc-517141. Western blot analysis of GLIPR1 expression in HeLa whole cell lysate.

### **SELECT PRODUCT CITATIONS**

 Peng, W., et al. 2021. GLIPR1 protects against cigarette smoke-induced airway inflammation via PLAU/EGFR signaling. Int. J. Chron. Obstruct. Pulmon. Dis. 16: 2817-2832.

# **RESEARCH USE**

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

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