

## 2310004I24Rik (Q-16): sc-166996

### BACKGROUND

2310004I24Rik, also known as ADPRibase-Mn or manganese-dependent ADP-ribose/CDP-alcohol diphosphatase, is a 340 amino acid mouse protein that belongs to the ADPRibase-Mn family and exists as 2 alternatively spliced isoforms. While it hydrolyzes ADP-ribose, IDP-ribose, CDP-glycerol, CDP-choline and CDP-ethanolamine, 2310004I24Rik may be involved in immune cell signaling as suggested by the second-messenger role of ADP-ribose, which activates TRPM2 as a mediator of oxidative/nitrosative stress. The human homolog of 2310004I24Rik, known as C17orf48, is a 342 amino acid protein that belongs to the ADPRibase-Mn family and exists as 2 alternatively spliced isoforms. The gene encoding C17orf48 consists of approximately 13,949 bases and maps to human chromosome 17.

### REFERENCES

- Hall, J.M., et al. 1992. Closing in on a breast cancer gene on chromosome 17q. *Am. J. Hum. Genet.* 50: 1235-1242.
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- Varley, J.M., et al. 1997. A detailed study of loss of heterozygosity on chromosome 17 in tumours from Li-Fraumeni patients carrying a mutation to the TP53 gene. *Oncogene* 14: 865-871.
- Kersemaekers, A.M., et al. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. *Br. J. Cancer* 77: 192-200.
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- Piura, B., et al. 2001. Three primary malignancies related to BRCA1 185delAG mutation successively occurring in a BRCA1 185delAG mutation carrier. *Eur. J. Obstet. Gynecol. Reprod. Biol.* 97: 241-244.
- Minamoto, T., et al. 2001. Distinct pattern of p53 phosphorylation in human tumors. *Oncogene* 20: 3341-3347.

### CHROMOSOMAL LOCATION

Genetic locus: 2310004I24Rik (mouse) mapping to 11 B3.

### SOURCE

2310004I24Rik (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of 2310004I24Rik of mouse origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-166996 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

2310004I24Rik (Q-16) is recommended for detection of 2310004I24Rik of mouse origin and RGD1309906 of rat 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 2310004I24Rik siRNA (m): sc-108647, 2310004I24Rik shRNA Plasmid (m): sc-108647-SH and 2310004I24Rik shRNA (m) Lentiviral Particles: sc-108647-V.

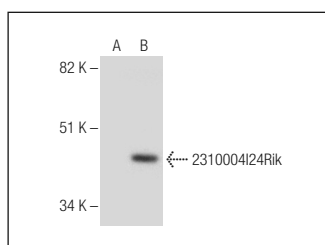
Molecular Weight of 2310004I24Rik isoforms: 39/24 kDa.

Positive Controls: 2310004I24Rik (m): 293T Lysate: sc-124866.

### 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



2310004I24Rik (Q-16): sc-166996. Western blot analysis of 2310004I24Rik expression in non-transfected: sc-117752 (A) and mouse 2310004I24Rik transfected: sc-124866 (B) 293T whole cell lysates.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.