

PERQ1 (N-15): sc-163227

BACKGROUND

PERQ1, also known as PERQ amino acid-rich with GYF domain-containing protein 1, GIGYF1 (GRB10 interacting GYF protein 1), GYF1 (GYF domain containing 1), GRB10-interacting GYF protein 1 or postmeiotic segregation increased 2-like 12, is a 1,035 amino acid phosphoprotein that contains one GYF domain and belongs to the PERQ family. Ubiquitously expressed, PERQ1 exhibits highest expression in brain and lung, followed by heart, spleen and kidney. PERQ1 contains a GYF domain in its N-terminal half and a clathrin light chain homology domain in its C-terminal half. PERQ1 interacts with GRB10, with transient binding increased under IGF-I stimulation, thereby leading to recruitment of the PERQ1/GRB10 complex to the IGF-I receptor. PERQ1 may also increase IRS-1, Shc and IGF-I receptor phosphorylation during IGF-I stimulation, and may act cooperatively with GRB10 to regulate tyrosine kinase receptor signaling.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GIGYF1 (human) mapping to 7q22.1; Gigyf1 (mouse) mapping to 5 G2.

SOURCE

PERQ1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PERQ1 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.

Blocking peptide available for competition studies, sc-163227 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PERQ1 (N-15) is recommended for detection of PERQ1 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).

PERQ1 (N-15) is also recommended for detection of PERQ1 in additional species, including equine and canine.

Suitable for use as control antibody for PERQ1 siRNA (h): sc-89495, PERQ1 siRNA (m): sc-152176, PERQ1 shRNA Plasmid (h): sc-89495-SH, PERQ1 shRNA Plasmid (m): sc-152176-SH, PERQ1 shRNA (h) Lentiviral Particles: sc-89495-V and PERQ1 shRNA (m) Lentiviral Particles: sc-152176-V.

Molecular Weight of PERQ1: 115 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or A549 cell lysate: sc-2413.

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.