

PPP1R3F (N-16): sc-248298

BACKGROUND

Seven family members of glycogen-targeting subunits are designated in humans: PPP1R3, PPP1R4, PTG, PPP1R6, PPP1R3E, PPP1R3F and PPP1R3G. Glycogen-targeting subunits bind to PP1 regulate its substrate activity and localize it to specific cellular sites. Glycogen-targeting subunits may also function as a scaffold for the assembly and regulation of glycogen metabolizing enzymes. PPP1R3F (protein phosphatase 1, regulatory (inhibitor) subunit 3F), also known as HB2E, is a 799 amino acid single-pass membrane protein that contains one carbohydrate binding type-21 (CBM21) domain. Encoded by a gene that maps to human chromosome Xp11.23, PPP1R3F exists in a novel candidate gene locus, from Xp11.2 to Xq13.3, that is linked to parkinsonian syndrome with variable spasticity and four-repeat Tau pathology. PPP1R3F is also a candidate synaptic gene that may play a role in autism spectrum disorder and schizophrenia.

REFERENCES

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- Pautsch, A., et al. 2008. Molecular recognition of the protein phosphatase 1 glycogen targeting subunit by glycogen phosphorylase. *J. Biol. Chem.* 283: 8913-8918.
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CHROMOSOMAL LOCATION

Genetic locus: PPP1R3F (human) mapping to Xp11.23; Ppp1r3f (mouse) mapping to X A1.1.

SOURCE

PPP1R3F (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of PPP1R3F 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-248298 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PPP1R3F (N-16) is recommended for detection of PPP1R3F of mouse, rat and 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); non cross-reactive with other PPP1R3 family members.

Suitable for use as control antibody for PPP1R3F siRNA (h): sc-91069, PPP1R3F siRNA (m): sc-152423, PPP1R3F shRNA Plasmid (h): sc-91069-SH, PPP1R3F shRNA Plasmid (m): sc-152423-SH, PPP1R3F shRNA (h) Lentiviral Particles: sc-91069-V and PPP1R3F shRNA (m) Lentiviral Particles: sc-152423-V.

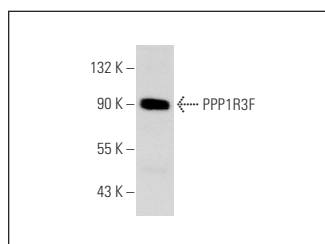
Molecular Weight of PPP1R3F: 83 kDa.

Positive Controls: mouse cerebellum extract: sc-2403 or mouse brain extract: sc-2253.

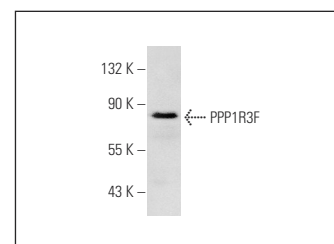
RECOMMENDED SECONDARY REAGENTS

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



PPP1R3F (N-16): sc-248298. Western blot analysis of PPP1R3F expression in mouse brain tissue extract.



PPP1R3F (N-16): sc-248298. Western blot analysis of PPP1R3F expression in mouse cerebellum tissue extract.

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.