

SAPAP3 (E-13): sc-162138

BACKGROUND

Members of the postsynaptic density-95 (PSD-95)/SAP90 family of membrane-associated guanylate kinase (MAGUK) proteins function as multimodular scaffolds that organize protein-signaling complexes at neuronal synapses. SAPAP3 (PSD-95/SAP90-binding protein 3), also known as DLGAP3 (disks large-associated protein 3) or DAP3, is a 979 amino acid protein that belongs to the SAPAP family of PSD-95/SAP90-associated proteins. Localized to the cell junction, as well as to the peripheral membrane and the cell synapse, SAPAP3 is thought to play a role in the organization of neuronal cell signaling and synapses, and may also function as an adaptor protein, possibly linking ion channels with the cytoskeleton.

REFERENCES

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4. Welch, J.M., et al. 2007. Cortico-striatal synaptic defects and OCD-like behaviours in Sapap3-mutant mice. *Nature* 448: 894-900.
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CHROMOSOMAL LOCATION

Genetic locus: DLGAP3 (human) mapping to 1p34.3; Dlgap3 (mouse) mapping to 4 D2.2.

SOURCE

SAPAP3 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SAPAP3 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-162138 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

SAPAP3 (E-13) is recommended for detection of SAPAP3 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); non cross-reactive with other SAPAP family members.

SAPAP3 (E-13) is also recommended for detection of SAPAP3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SAPAP3 siRNA (h): sc-78703, SAPAP3 siRNA (m): sc-37382, SAPAP3 shRNA Plasmid (h): sc-78703-SH, SAPAP3 shRNA Plasmid (m): sc-37382-SH, SAPAP3 shRNA (h) Lentiviral Particles: sc-78703-V and SAPAP3 shRNA (m) Lentiviral Particles: sc-37382-V.

Molecular Weight of SAPAP3: 106 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.

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 or our catalog for detailed protocols and support products.