

# SAPAP2 (D-14): sc-87418

## BACKGROUND

A guanylate kinase is a phosphotransferase that produces ADP and GDP from the substrates ATP and GMP. SAPAP2, also known as DAP-2 (Disks large-associated protein 2) and PSD-95/SAP90-binding protein 2, is a 1,054 amino acid protein that localizes to the postsynaptic membrane of neuronal cells of the brain and kidney. SAPAP2 likely acts as a signaling molecule which interacts with the human genes DLG1 and DLG4/PSD-95. The gene encoding SAPAP2, DLGAP2, maps to human chromosome 8. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DLGAP2 (human) mapping to 8p23.3; Dlgap2 (mouse) mapping to 8 A1.1.

## SOURCE

SAPAP2 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SAPAP2 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-87418 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SAPAP2 (D-14) is recommended for detection of SAPAP2 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 SAPAP1 or SAPAP4.

SAPAP2 (D-14) is also recommended for detection of SAPAP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SAPAP2 siRNA (h): sc-77555, SAPAP2 siRNA (m): sc-153220, SAPAP2 shRNA Plasmid (h): sc-77555-SH, SAPAP2 shRNA Plasmid (m): sc-153220-SH, SAPAP2 shRNA (h) Lentiviral Particles: sc-77555-V and SAPAP2 shRNA (m) Lentiviral Particles: sc-153220-V.

Molecular Weight of SAPAP2: 117 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.

## 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.