

SAPS2 (C-5): sc-376238

BACKGROUND

SAPS2 (SAPS domain family, member 2), also known as PP6R2, KIAA0685 or SAP190, is a 966 amino acid protein that localizes to the cytoplasm and exists as multiple alternatively spliced isoforms. Expressed ubiquitously with strongest levels present in testis, heart, liver, brain, kidney and placenta, SAPS2 functions as a regulatory subunit of the PP6 (protein phosphatase 6) holoenzyme that may play a role in protein scaffolding and κ B-degradation. The gene encoding SAPS2 maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

1. Ishikawa, K., et al. 1998. Prediction of the coding sequences of unidentified human genes. X. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 5: 169-176.
2. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. Chromosome 22. Genet. Test. 2: 89-97.
3. Schwab, S.G., et al. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
4. Stefansson, B., et al. 2006. Protein phosphatase 6 subunit with conserved Sit4-associated protein domain targets κ B ϵ . J. Biol. Chem. 281: 22624-22634.
5. Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. Semin. Pediatr. Neurol. 14: 136-139.

CHROMOSOMAL LOCATION

Genetic locus: PPP6R2 (human) mapping to 22q13.33; Ppp6r2 (mouse) mapping to 15 E3.

SOURCE

SAPS2 (C-5) is a mouse monoclonal antibody raised against a peptide mapping at the N-terminus of SAPS2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SAPS2 (C-5) is available conjugated to agarose (sc-376238 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376238 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376238 PE), fluorescein (sc-376238 FITC), Alexa Fluor[®] 488 (sc-376238 AF488), Alexa Fluor[®] 546 (sc-376238 AF546), Alexa Fluor[®] 594 (sc-376238 AF594) or Alexa Fluor[®] 647 (sc-376238 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376238 AF680) or Alexa Fluor[®] 790 (sc-376238 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

SAPS2 (C-5) is recommended for detection of SAPS2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 SAPS2 siRNA (h): sc-76450, SAPS2 siRNA (m): sc-76451, SAPS2 shRNA Plasmid (h): sc-76450-SH, SAPS2 shRNA Plasmid (m): sc-76451-SH, SAPS2 shRNA (h) Lentiviral Particles: sc-76450-V and SAPS2 shRNA (m) Lentiviral Particles: sc-76451-V.

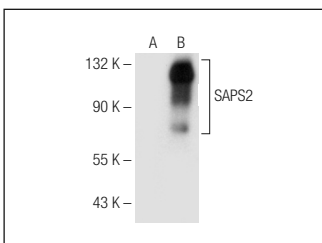
Molecular Weight of SAPS2: 105 kDa.

Positive Controls: SAPS2 (h4): 293T Lysate: sc-116404, Hep G2 cell lysate: sc-2227 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



SAPS2 (C-5): sc-376238. Western blot analysis of SAPS2 expression in non-transfected: sc-117752 (A) and human SAPS2 transfected: sc-116404 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Hu, Z., et al. 2021. ULK1 phosphorylation of striatin activates protein phosphatase 2A and autophagy. Cell Rep. 36: 109762.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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