

GASP-2 (F-6): sc-390664

BACKGROUND

G protein-coupled receptors play a role in many different stimulus-response pathways. G protein-coupled receptors mediate extracellular signals into intracellular signals (G protein activation). They respond to a wide variety of signaling molecules, including hormones, neurotransmitters and other proteins and peptides. GASP-2 (G protein-coupled receptor associated sorting protein 2), also known as GPRASP2, is an 838 amino acid protein that regulates a number of G protein-coupled receptors, such as CT-R (calcitonin receptor) and mAChR M1 (muscarinic acetylcholine receptor M1), through interactions with their cytoplasmic tails. Expressed primarily in brain, GASP-2 is a member of the GPRASP family and forms a complex with Huntingtin, with which it is thought to influence receptor trafficking.

REFERENCES

1. Lee, D.K., et al. 2002. Novel G protein-coupled receptor genes expressed in the brain: continued discovery of important therapeutic targets. *Expert Opin. Ther. Targets* 6: 185-202.
2. Simonin, F., et al. 2004. Identification of a novel family of G protein-coupled receptor associated sorting proteins. *J. Neurochem.* 89: 766-775.
3. Horn, S.C., et al. 2006. Huntingtin interacts with the receptor sorting family protein GASP-2. *J. Neural Transm.* 113: 1081-1090.

CHROMOSOMAL LOCATION

Genetic locus: GPRASP2 (human) mapping to Xq22.1; Gprasp2 (mouse) mapping to X F1.

SOURCE

GASP-2 (F-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 272-297 of GASP-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GASP-2 (F-6) is available conjugated to agarose (sc-390664 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390664 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390664 PE), fluorescein (sc-390664 FITC), Alexa Fluor® 488 (sc-390664 AF488), Alexa Fluor® 546 (sc-390664 AF546), Alexa Fluor® 594 (sc-390664 AF594) or Alexa Fluor® 647 (sc-390664 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390664 AF680) or Alexa Fluor® 790 (sc-390664 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390664 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

GASP-2 (F-6) is recommended for detection of GASP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 GASP-2 siRNA (h): sc-91285, GASP-2 siRNA (m): sc-145338, GASP-2 shRNA Plasmid (h): sc-91285-SH, GASP-2 shRNA Plasmid (m): sc-145338-SH, GASP-2 shRNA (h) Lentiviral Particles: sc-91285-V and GASP-2 shRNA (m) Lentiviral Particles: sc-145338-V.

Molecular Weight of GASP-2: 94 kDa.

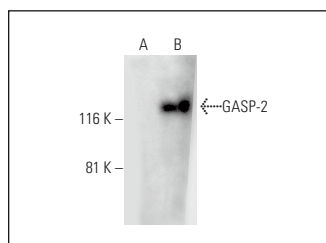
Positive Controls: GASP-2 (h3): 293T Lysate: sc-111294 or Neuro-2A whole cell lysate: sc-364185.

RECOMMENDED SUPPORT REAGENTS

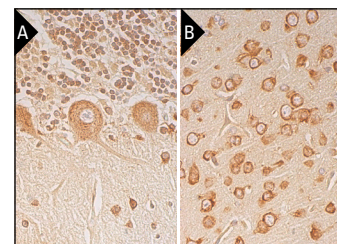
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



GASP-2 (F-6): sc-390664. Western blot analysis of GASP-2 expression in non-transfected: sc-117752 (A) and human GASP-2 transfected: sc-111294 (B) 293T whole cell lysates.



GASP-2 (F-6): sc-390664. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic and nuclear staining of Purkinje cells and cells in molecular layer (A) and mouse brain tissue showing cytoplasmic staining of neuronal cells and endothelial cells and cytoplasmic and nuclear staining of glial cells (B). Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216.

RESEARCH USE

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