

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



The Power to Question

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 GASP2. *J. Neural Transm.* 113: 1081-1090.
4. Rozenfeld, R. and Devi, L.A. 2010. Exploring a role for heteromerization in GPCR signalling specificity. *Biochem. J.* 433: 11-18.
5. Costanzi, S. 2010. Modeling G protein-coupled receptors: a concrete possibility. *Chim. Oggi* 28: 26-31.

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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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) 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.

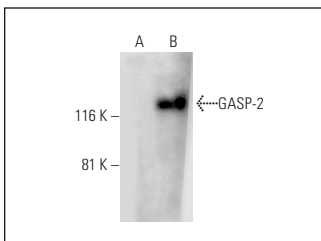
Molecular Weight of GASP-2: 94 kDa.

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

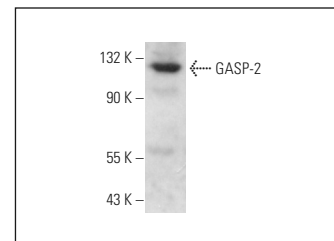
RECOMMENDED SUPPORT REAGENTS

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.

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. Western blot analysis of GASP-2 expression in Neuro-2A whole cell lysate.

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 for detailed protocols and support products.