

GASP-2 (E-14): sc-162842

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., et al. 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.
6. Borroto-Escuela, D.O., et al. 2011. Muscarinic receptor family interacting proteins: Role in receptor function. *J. Neurosci. Methods* 195: 161-169.

CHROMOSOMAL LOCATION

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

SOURCE

GASP-2 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GASP-2 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-162842 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

GASP-2 (E-14) is recommended for detection of GASP-2 of human origin and GASP2 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, 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); non cross-reactive with GASP-1.

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.

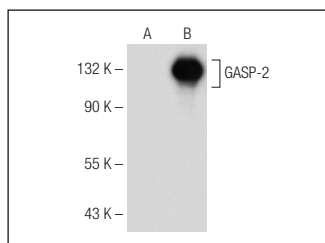
Molecular Weight of GASP-2: 94 kDa.

Positive Controls: GASP-2 (h): 293T Lysate: sc-111294.

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.

DATA



GASP-2 (E-14): sc-162842. 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **GASP-2 (F-6): sc-390664**, our highly recommended monoclonal alternative to GASP-2 (E-14).