

GABARAPL2 (F-14): sc-323902

BACKGROUND

GABARAPL2 (γ -aminobutyric acid receptor-associated protein-like 2), also known as ATG8, GEF2 (ganglioside expression factor 2), ATG8C or GATE16 (golgi-associated ATPase enhancer of 16 kDa), is a 117 amino acid protein belonging to the MAP1 LC3 family. Localized to Golgi apparatus, GABARAPL2 is ubiquitously expressed. Very high levels of GABARAPL2 are found in brain, heart, prostate, ovary, spleen and skeletal muscle. GABARAPL2 is subject to post-translational modifications, including phosphorylation, which is thought to occur in response to DNA damage by ATM or ATR. GABARAPL2 is involved in intra-Golgi traffic and modulates intra-Golgi transport through coupling between NSF and SNAREs activation. GABARAPL2 interacts with GABA_A R γ 2, NSF, GS28, β Tubulin and ULK1.

REFERENCES

- Sagiv, Y., et al. 2000. GATE-16, a membrane transport modulator, interacts with NSF and the Golgi v-SNARE GOS-28. *EMBO J.* 19: 1494-1504.
- Paz, Y., et al. 2000. Structure of GATE-16, membrane transport modulator and mammalian ortholog of autophagocytosis factor Aut7p. *J. Biol. Chem.* 275: 25445-25450.
- Xin, Y., et al. 2001. Cloning, expression patterns, and chromosome localization of three human and two mouse homologues of GABA_A receptor-associated protein. *Genomics* 74: 408-413.
- Hemelaar, J., et al. 2003. A single protease, Apg4B, is specific for the autophagy-related ubiquitin-like proteins GATE-16, MAP1-LC3, GABARAP, and Apg8L. *J. Biol. Chem.* 278: 51841-51850.
- Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.

CHROMOSOMAL LOCATION

Genetic locus: GABARAPL2 (human) mapping to 16q23.1; Gabarapl2 (mouse) mapping to 8 E1.

SOURCE

GABARAPL2 (F-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GABARAPL2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-323902 P, (100 μ g 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.

APPLICATIONS

GABARAPL2 (F-14) is recommended for detection of GABARAPL2 of mouse and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with GABARAPL1 or GABARAPL3.

GABARAPL2 (F-14) is also recommended for detection of GABARAPL2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GABARAPL2 siRNA (h): sc-41958, GABARAPL2 siRNA (m): sc-41959, GABARAPL2 shRNA Plasmid (h): sc-41958-SH, GABARAPL2 shRNA Plasmid (m): sc-41959-SH, GABARAPL2 shRNA (h) Lentiviral Particles: sc-41958-V and GABARAPL2 shRNA (m) Lentiviral Particles: sc-41959-V.

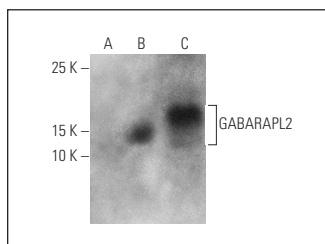
Molecular Weight of GABARAPL2: 14 kDa.

Positive Controls: GABARAPL2 (m): 293T Lysate: sc-120379 or F9 cell lysate: sc-2245.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



GABARAPL2 (F-14): sc-323902. Western blot analysis of GABARAPL2 expression in non-transfected 293T: sc-117752 (A), mouse GABARAPL2 transfected 293T: sc-120379 (B) and F9 (C) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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