

GABARAP (FL-117): sc-28938

BACKGROUND

In the central nervous system GABA functions as the main inhibitory transmitter by increasing a Cl⁻ conductance that inhibits neuronal firing. GABA has been shown to activate both ionotropic (GABA_A) and metabotropic (GABA_B) receptors as well as a third class of receptors called GABA_C. In addition to GABA receptors, several proteins have been identified as regulators of GABA function, including GAD65, GAD67, GABA transporters and GABARAP (GABA_A receptor-associated protein). GABARAP associates with GABA_A Ry2 to link GABA_A receptors to the cytoskeleton. The GABARAP protein sequence is similar to light chain-3 of microtubule-associated proteins (MAPs), suggesting that it may be a type of MAP or a component of a MAP complex.

CHROMOSOMAL LOCATION

Genetic locus: GABARAP (human) mapping to 17p13.1, GABARAPL2 (human) mapping to 16q23.1; Gabarap (mouse) mapping to 11 B3, Gabarapl2 (mouse) mapping to 8 E1.

SOURCE

GABARAP (FL-117) is a rabbit polyclonal antibody raised against amino acids 1-117 representing full length GABARAP 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.

APPLICATIONS

GABARAP (FL-117) is recommended for detection of GABARAP and GABARAPL2 of mouse, rat and human origin 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).

GABARAP (FL-117) is also recommended for detection of GABARAP and GABARAPL2 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of GABARAP: 14 kDa.

Positive Controls: GABARAP (m): 293T Lysate: sc-125364.

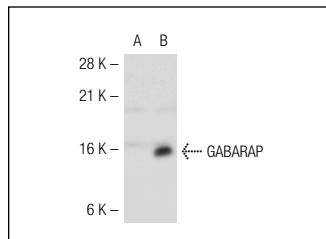
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

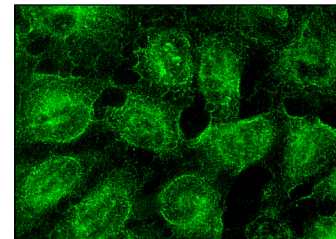
STORAGE

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

DATA



GABARAP (FL-117): sc-28938. Western blot analysis of GABARAP expression in non-transfected: sc-117752 (A) and mouse GABARAP transfected: sc-125364 (B) 293T whole cell lysates.



GABARAP (FL-117): sc-28938. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Lee, J.H., et al. 2005. GABA_A receptor-associated protein (GABARAP) induces apoptosis by interacting with DEAD (Asp-Glu-Ala-Asp/His) box polypeptide 47 (DDX 47). *Biotechnol. Lett.* 27: 623-628.
2. Marsden, K.C., et al. 2007. NMDA receptor activation potentiates inhibitory transmission through GABA receptor-associated protein-dependent exocytosis of GABA_A receptors. *J. Neurosci.* 27: 14326-14337.
3. Gonçalves, D.A., et al. 2012. Clenbuterol suppresses proteasomal and lysosomal proteolysis and atrophy-related genes in denervated rat soleus muscles independently of Akt. *Am. J. Physiol. Endocrinol. Metab.* 302: E123-E133.
4. Chang, N.C., et al. 2012. Bcl-2-associated autophagy regulator Naf-1 required for maintenance of skeletal muscle. *Hum. Mol. Genet.* 21: 2277-2287.

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.



Try **GABARAP (E-8): sc-377300**, our highly recommended monoclonal alternative to GABARAP (FL-117).