

GABA_A R β 3 (V-17): sc-31430

BACKGROUND

GAD-65 and GAD-67, glutamate decarboxylases function to catalyze the production of GABA (γ -aminobutyric acid). 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. Both GABA_A and GABA_C are ligand-gated ion channels, however, they are structurally and functionally distinct. Members of the GABA_A receptor family include GABA_A R α 1-6, GABA_A R β 1-3, GABA_A R γ 1-3, GABA_A R δ , GABA_A R ϵ , GABA_A R ρ 1 and GABA_A R ρ 2. The GABA_B family is composed of GABA_B R1 α and GABA_B R1 β . GABA transporters have also been identified and include GABA T-1, GABA T-2 and GABA T-3 (also designated GAT-1, -2, and -3). The GABA transporters function to terminate GABA action.

CHROMOSOMAL LOCATION

Genetic locus: GABRB3 (human) mapping to 15q12; Gabrb3 (mouse) mapping to 7 C.

SOURCE

GABA_A R β 3 (V-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GABA_A R β 3 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-31430 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GABA_A R β 3 (V-17) is recommended for detection of GABA_A R β 3 of mouse, rat 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).

GABA_A R β 3 (V-17) is also recommended for detection of GABA_A R β 3 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for GABA_A R β 3 siRNA (h): sc-42441, GABA_A R β 3 siRNA (m): sc-42442, GABA_A R β 3 shRNA Plasmid (h): sc-42441-SH, GABA_A R β 3 shRNA Plasmid (m): sc-42442-SH, GABA_A R β 3 shRNA (h) Lentiviral Particles: sc-42441-V and GABA_A R β 3 shRNA (m) Lentiviral Particles: sc-42442-V.

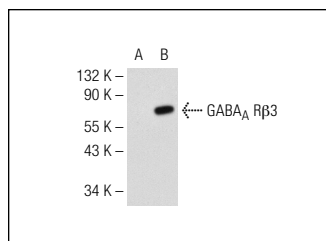
Molecular Weight of GABA_A R β 3: 45-60 kDa.

Positive Controls: GABA_A R β 3 (h2): 293T Lysate: sc-173318 or EOC 20 whole cell lysate: sc-364187.

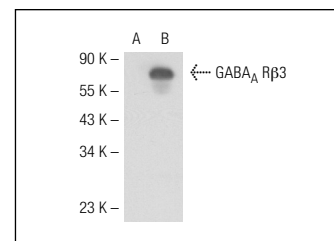
RECOMMENDED SECONDARY REAGENTS

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



GABA_A R β 3 (V-17): sc-31430. Western blot analysis of GABA_A R β 3 expression in non-transfected: sc-117752 (A) and human GABA_A R β 3 transfected: sc-173318 (B) 293T whole cell lysates.



GABA_A R β 3 (V-17): sc-31430. Western blot analysis of GABA_A R β 3 expression in non-transfected: sc-117752 (A) and human GABA_A R β 3 transfected: sc-173039 (B) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **GABA_A R β 3 (D-12): sc-376252**, our highly recommended monoclonal alternative to GABA_A R β 3 (V-17).