SANTA CRUZ BIOTECHNOLOGY, INC.

β-Arrestin-2 (H-47): sc-98833



BACKGROUND

The members of the G protein-coupled receptor family are distinguished by their slow transmitting response to ligand binding. These seven transmembrane proteins include the adrenergic, serotonin and dopamine receptors. The effect of the signaling molecule can be excitatory or inhibitory depending on the type of receptor to which it binds. Members of the β -Arrestin family regulate receptor binding to G proteins. β -Arrestins have been found to be located at postsynaptic sites, where they are thought to act in concert with β ARK (β ARK-1, also designated GRK 2, or β ARK-2, also designated GRK 3) to regulate G protein-coupled neurotransmitter receptors. Expression of β -Arrestin-1 and β -Arrestin-2 is seen predominantly in spleen and neuronal tissues. It has been shown that β -Arrestin-1 expression is modulated by intracellular cAMP, which may be a novel mechanism for the regulation of receptor-mediated responses.

CHROMOSOMAL LOCATION

Genetic locus: ARRB2 (human) mapping to 17p13.2; Arrb2 (mouse) mapping to 11 B3.

SOURCE

 β -Arrestin-2 (H-47) is a rabbit polyclonal antibody raised against amino acids 79-125 mapping near the N-terminus of β -Arrestin-2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

 β -Arrestin-2 (H-47) is recommended for detection of β -Arrestin-2 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).

 β -Arrestin-2 (H-47) is also recommended for detection of β -Arrestin-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for β -Arrestin-2 siRNA (h): sc-29208, β -Arrestin-2 siRNA (m): sc-29743, β -Arrestin-2 siRNA (r): sc-63299, β -Arrestin-2 shRNA Plasmid (h): sc-29208-SH, β -Arrestin-2 shRNA Plasmid (m): sc-29743-SH, β -Arrestin-2 shRNA Plasmid (r): sc-63299-SH, β -Arrestin-2 shRNA (h) Lentiviral Particles: sc-29208-V, β -Arrestin-2 shRNA (m) Lentiviral Particles: sc-29208-V, β -Arrestin-2 shRNA (m) Lentiviral Particles: sc-63299-V.

Molecular Weight for β-Arrestin-2: 55 kDa.

Positive Controls: β -Arrestin-2 (m): 293T Lysate: sc-110713, PC-12 cell lysate: sc-2250 or RAW 264.7 whole cell lysate: sc-2211.

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.

DATA



 β -Arrestin-2 (H-47): sc-98833. Western blot analysis of β -Arrestin-2 expression in non-transfected: sc-117752 (**A**) and mouse β -Arrestin-2 transfected: sc-110713 (**B**) 2937 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Deslauriers, J., et al. 2013. α -Lipoic acid interaction with dopamine D2 receptor-dependent activation of the Akt/GSK-3 β signaling pathway induced by antipsychotics: potential relevance for the treatment of schizophrenia. J. Mol. Neurosci. 50: 134-145.

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 β-Arrestin-2 (B-4): sc-365445 or β-Arrestin-2

MONOS Satisfation Guaranteed

(D-5): sc-166935, our highly recommended monoclonal alternatives to β -Arrestin-2 (H-47). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see β -Arrestin-2 (B-4): sc-365445.