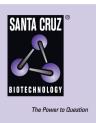
SANTA CRUZ BIOTECHNOLOGY, INC.

mAChR M3 (C-20): sc-7474



BACKGROUND

The muscarinic acetylcholine receptors (mAChR) mediate a variety of cellular responses, including inhibition of adenylate cyclase, breakdown of phosphoinositides and modulation of potassium channels. The mAChRs transduce signals by coupling to G proteins, which then modulate several downstream effector proteins and ion channels. Five mAChR subtypes have been identified, designated M1 to M5. The five receptor subtypes show distinct patterns of tissue distribution, as well as distinct pharmacological and functional properties. The amino acid sequence of each mAChR subtype reflects a structure that is characteristic of G-protein coupled receptors, consisting of seven highly conserved transmembrane segments and a large intracellular region unique to each subtype, which constitutes the effector-coupling domain.

CHROMOSOMAL LOCATION

Genetic locus: CHRM3 (human) mapping to 1q43; Chrm3 (mouse) mapping to 13 A1.

SOURCE

mAChR M3 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of mAChR M3 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.

Blocking peptide available for competition studies, sc-7474 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

mAChR M3 (C-20) is recommended for detection of mAChR M3 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).

Suitable for use as control antibody for mAChR M3 siRNA (h): sc-35833, mAChR M3 siRNA (m): sc-35834, mAChR M3 shRNA Plasmid (h): sc-35833-SH, mAChR M3 shRNA Plasmid (m): sc-35834-SH, mAChR M3 shRNA (h) Lentiviral Particles: sc-35833-V and mAChR M3 shRNA (m) Lentiviral Particles: sc-35834-V.

Molecular Weight of mAChR M3: 75 kDa.

Positive Controls: mouse brain extract: sc-2253 or BC₃H1 cell lysate: sc-2299.

STORAGE

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

PROTOCOLS

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

SELECT PRODUCT CITATIONS

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- Lage, K., et al. 2010. Dissecting spatio-temporal protein networks driving human heart development and related disorders. Mol. Syst. Biol. 6: 381.

RESEARCH USE

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