

ADRA1B Blocking Peptide (C-term)

Synthetic peptide Catalog # BP19930b

Specification

ADRA1B Blocking Peptide (C-term) - Product Information

Primary Accession <u>P35368</u>

Other Accession <u>P15823</u>, <u>P97717</u>, <u>NP_000670.1</u>

ADRA1B Blocking Peptide (C-term) - Additional Information

Gene ID 147

Other Names

Alpha-1B adrenergic receptor, Alpha-1B adrenoreceptor, Alpha-1B adrenoceptor, ADRA1B

Target/Specificity

The synthetic peptide sequence is selected from aa 395-409 of HUMAN ADRA1B

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ADRA1B Blocking Peptide (C-term) - Protein Information

Name ADRA1B

Function

This alpha-adrenergic receptor mediates its action by association with G proteins that activate a phosphatidylinositol- calcium second messenger system. Its effect is mediated by G(q) and G(11) proteins. Nuclear ADRA1A-ADRA1B heterooligomers regulate phenylephrine (PE)-stimulated ERK signaling in cardiac myocytes.

Cellular Location

Nucleus membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasm Membrane, caveola. Note=Location at the nuclear membrane facilitates heterooligomerization and regulates ERK- mediated signaling in cardiac myocytes. signaling in cardiac myocytes Colocalizes with GNAQ, PLCB1 as well as LAP2 at the nuclear membrane of cardiac myocytes



ADRA1B Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

ADRA1B Blocking Peptide (C-term) - Images

ADRA1B Blocking Peptide (C-term) - Background

Alpha-1-adrenergic receptors (alpha-1-ARs) are members of the G protein-coupled receptor superfamily. They activate mitogenic responses and regulate growth and proliferation of many cells. There are 3 alpha-1-AR subtypes: alpha-1A, -1B and -1D, all of which signal through the Gq/11 family of G-proteins and different subtypes show different patterns of activation. This gene encodes alpha-1B-adrenergic receptor, which induces neoplastic transformation when transfected into NIH 3T3 fibroblasts and other cell lines. Thus, this normal cellular gene is identified as a protooncogene. This gene comprises 2 exons and a single large intron of at least 20 kb that interrupts the coding region.

ADRA1B Blocking Peptide (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010):
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Jensen, B.C., et al. Circ Heart Fail 2(6):654-663(2009)
Talmud, P.I., et al. Am. J. Hum. Genet. 85(5):628-642(2009)