Bioworld Technology CO., Ltd.



ADCY9 Peptide

Cat No.: BS5590P

Background

Adenylyl cyclases function to convert ATP to cyclic AMP in response to activation by a variety of hormones, neurotransmitters and other regulatory molecules. Cyclic AMP, in turn, activates several other target molecules (primarily cyclic AMP-dependent protein kinases) to control a broad range of diverse phenomena such as metabolism, gene transcription and memory. Classically, adenylyl cyclases respond to receptor-initiated signals, mediated by the Gs and Gi heterotrimeric G proteins. The binding of an agonist to a Gs-coupled receptor (i.e., α β -adrenergic receptor) catalyzes the exchange of GDP (bound to G α s) for GTP, dissociation of GTP-G α s

from G β γ and G α s-mediated activation of adenylyl cyclase. The most abundant cerebral adenylyl cyclases appears to be adenylyl cyclase IX. AC IX is confined to the gray matter and its expression is mainly neuronal, with its highest expression located at the hippocampus. ACIX is also expressed in heart, pancreas and thyrocytes. AC I and AC IX are regulated reciprocally by intracellular free Ca2+. The inhibition of AC IX by Ca2+ is blocked by the calcineurin inhibitors FK506 and cyclosporin A.

Swiss-Prot

O60503

Applications

Blocking

Specificity

This peptide can be used with studies using BS5590 ADCY9 pAb.

Purification & Purity

Synthetic peptide ADCY9. (Note: the amino acid sequence is proprietary). The purity is > 98%.

Product

1 mg/ml in DI water.

Storage & Stability

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Research Use

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