10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADCY7 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP9389c

Specification

ADCY7 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P51828

ADCY7 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 113

Other Names
Adenylate cyclase type 7, ATP pyrophosphate-lyase 7, Adenylate cyclase type VII, Adenylyl cyclase 7, ADCY7, KIAA0037

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.

ADCY7 Antibody (Center) Blocking Peptide - Protein Information

Name ADCY7 (HGNC:238)

Function
Catalyzes the formation of cAMP in response to activation of G protein-coupled receptors (Probable). Functions in signaling cascades activated namely by thrombin and sphingosine 1-phosphate and mediates regulation of cAMP synthesis through synergistic action of the stimulatory G alpha protein with GNA13 (PubMed:23229509, PubMed:18541530). Also, during inflammation, mediates zymosan-induced increase intracellular cAMP, leading to protein kinase A pathway activation in order to modulate innate immune responses through heterotrimeric G proteins G(12/13) (By similarity). Functions in signaling cascades activated namely by dopamine and C5 alpha chain and mediates regulation of cAMP synthesis through synergistic action of the stimulatory G protein with G beta:gamma complex (PubMed:23842570, PubMed:23229509). Functions, through cAMP response regulation, to keep inflammation under control during bacterial infection by sensing the presence of serum factors, such as the bioactive lysophospholipid (LPA) that regulate LPS-induced TNF-alpha production. However, it is also required for the optimal functions of B and T cells during adaptive immune responses by regulating cAMP synthesis in both B and T

cells (By similarity).

Cellular Location
Membrane; Multi-pass membrane protein.

ADCY7 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

ADCY7 Antibody (Center) Blocking Peptide - Images

ADCY7 Antibody (Center) Blocking Peptide - Background

ADCY7 encodes a membrane-bound adenylate cyclase that catalyses the formation of cyclic AMP from ATP and is inhibitable by calcium. The product of this gene is a member of the adenylyl cyclase class-4/guanylyl cyclase enzyme family that is characterized by the presence of twelve membrane-spanning domains in its sequences.

ADCY7 Antibody (Center) Blocking Peptide - References

Townsend, P.D., et al. J. Biol. Chem. 284(2):784-791(2009)Tabakoff, B., et al. BMC Biol. 7, 70 (2009) :Jiang, L.I., et al. J. Biol. Chem. 283(34):23429-23439(2008)Kou, J., et al. Alcohol. Clin. Exp. Res. 31(9):1467-1472(2007)Hines, L.M., et al. J. Neurosci. 26(48):12609-12619(2006)