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

GATA4 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1404b

Specification

GATA4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P43694

GATA4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2626

Other Names
Transcription factor GATA-4, GATA-binding factor 4, GATA4

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1404b was selected from the C-term region of human GATA4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

GATA4 Antibody (C-term) Blocking Peptide - Protein Information

Name GATA4

Function
Transcriptional activator that binds to the consensus sequence 5'-AGATAG-3' and plays a key role in cardiac development and function (PubMed:24000169, PubMed:27984724, PubMed:35182466). In cooperation with TBX5, it binds to cardiac super-enhancers and promotes cardiomyocyte gene expression, while it down-regulates endocardial and endothelial gene expression (PubMed:27984724). Involved in bone morphogenetic protein (BMP)-mediated induction of cardiac-specific gene expression. Binds to BMP response element (BMPRE) DNA sequences within cardiac activating regions (By similarity). Acts as a transcriptional activator of ANF in cooperation with NKX2-5 (By similarity). Promotes cardiac myocyte enlargement (PubMed:<a href="http://www.uniprot.org/citations/20081228"

target="_blank">20081228). Required during testicular development (PubMed:21220346). May play a role in sphingolipid signaling by regulating the expression of sphingosine-1- phosphate degrading enzyme, sphingosine-1-phosphate lyase (PubMed:15734735).

Cellular Location
Nucleus

GATA4 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

GATA4 Antibody (C-term) Blocking Peptide - Images

GATA4 Antibody (C-term) Blocking Peptide - Background

GATA4 is a member of the GATA family of zinc-finger transcription factors. Members of this family recognize the GATA motif which is present in the promoters of many genes. This protein is thought to regulate genes involved in embryogenesis and in myocardial differentiation and function. Mutations in the gene encoding GATA4 have been associated with cardiac septal defects.

GATA4 Antibody (C-term) Blocking Peptide - References

Rajagopal,S.K., J. Mol. Cell. Cardiol. 43 (6), 677-685 (2007)Philips,A.S., J. Biol. Chem. 282 (34), 24915-24927 (2007)