

GATA4 Blocking Peptide (Center)

Synthetic peptide

Catalog # BP1404c

Specification

GATA4 Blocking Peptide (Center) - Product Information

Primary Accession

[P43694](#)

Other Accession

[Q91677](#), [P46152](#), [Q08369](#)**GATA4 Blocking Peptide (Center) - Additional Information****Gene ID** 2626**Other Names**

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

Target/Specificity

The synthetic peptide sequence is selected from aa 255~269 of HUMAN GATA4

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 Blocking Peptide (Center) - 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: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 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

GATA4 Blocking Peptide (Center) - Images**GATA4 Blocking Peptide (Center) - 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 Blocking Peptide (Center) - References

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