

GATA6 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1797a

Specification

GATA6 Antibody - Product Information

Application	E, WB, FC
Primary Accession	O92908
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	60kDa KDa

Description

This gene is a member of a small family of zinc finger transcription factors that play an important role in the regulation of cellular differentiation and organogenesis during vertebrate development. This gene is expressed during early embryogenesis and localizes to endo- and mesodermally derived cells during later embryogenesis and thereby plays an important role in gut, lung, and heart development. Mutations in this gene are associated with several congenital defects.

Immunogen

Purified recombinant fragment of human GATA6 (AA: 491-557) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

GATA6 Antibody - Additional Information

Gene ID 2627

Other Names

Transcription factor GATA-6, GATA-binding factor 6, GATA6

Dilution

E~~1/10000

WB~~1/500 - 1/2000

FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GATA6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GATA6 Antibody - Protein Information

Name GATA6**Function**

Transcriptional activator (PubMed:19666519, PubMed:22750565, PubMed:22824924, PubMed:27756709). Regulates SEMA3C and PLXNA2 (PubMed:19666519). Involved in gene regulation specifically in the gastric epithelium (PubMed:9315713). May regulate genes that protect epithelial cells from bacterial infection (PubMed:16968778). Involved in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression (By similarity). Binds to BMP response element (BMPRE) DNA sequences within cardiac activating regions (By similarity). In human skin, controls several physiological processes contributing to homeostasis of the upper pilosebaceous unit. Triggers ductal and sebaceous differentiation as well as limits cell proliferation and lipid production to prevent hyperseborrhoea. Mediates the effects of retinoic acid on sebocyte proliferation, differentiation and lipid production. Also contributes to immune regulation of sebocytes and antimicrobial responses by modulating the expression of anti-inflammatory genes such as IL10 and pro-inflammatory genes such as IL6, TLR2, TLR4, and IFNG. Activates TGFB1 signaling which controls the interfollicular epidermis fate (PubMed:33082341).

Cellular Location

Nucleus

Tissue Location

Expressed in heart, gut and gut-derived tissues. Expressed in skin upper pilosebaceous unit. Expression is decreased or lost in acne lesions (PubMed:33082341).

GATA6 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

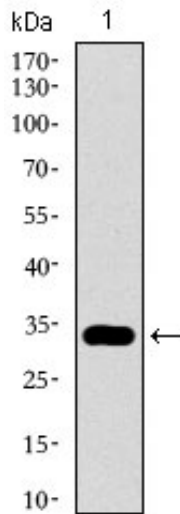
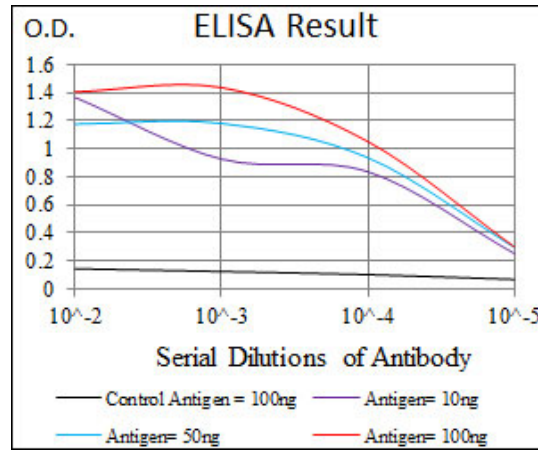


Figure 1: Western blot analysis using GATA6 mAb against human GATA6 recombinant protein. (Expected MW is 32.3 kDa)

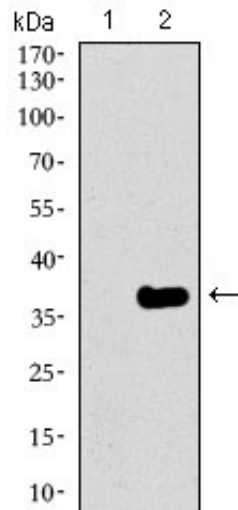


Figure 2: Western blot analysis using GATA6 mAb against HEK293 (1) and GATA6 (AA: 491-557)-hlgGfc transfected HEK293 (2) cell lysate.

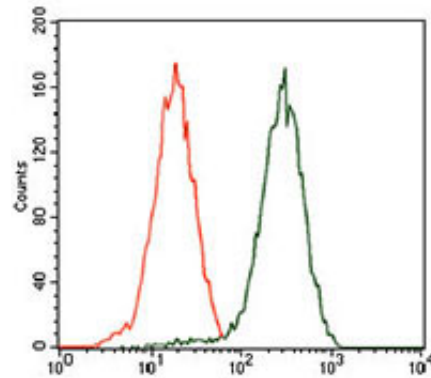


Figure 4: Flow cytometric analysis of HEK293 cells using GATA6 mouse mAb (green) and negative control (red).

GATA6 Antibody - Background

The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This gene was identified by its oncogenic transforming activity. This gene and FGF3, another oncogenic growth factor, are located closely on chromosome 11. Co-amplification of both genes was found in various kinds of human tumors. Studies on the mouse homolog suggested a function in bone morphogenesis and limb development through the sonic hedgehog (SHH) signaling pathway.

GATA6 Antibody - References

1. BMC Cancer. 2012 Jun 6;12:218.
2. Neonatology. 2011;99(3):231-40.