

Phospho-GATA6(Y271) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3766a

Specification

Phospho-GATA6(Y271) Antibody - Product Information

Application	IF, DB,E
Primary Accession	O92908
Other Accession	NP_005248.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

Phospho-GATA6(Y271) Antibody - Additional Information

Gene ID 2627

Other Names

GATA6; Transcription factor GATA-6; GATA-binding factor 6

Target/Specificity

This Phospho-GATA6-Y271 antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide surrounding Y271 of human GATA6, isoform 2.

Dilution

IF~~1:100
DB~~1:500

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

Phospho-GATA6(Y271) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-GATA6(Y271) 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

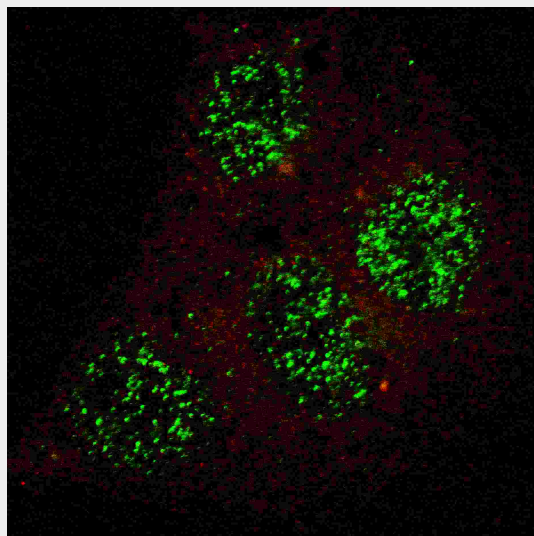
Expressed in heart, gut and gut-derived tissues. Expressed in skin upper pilosebaceous unit. Expression is decreased or lost in acne lesions (PubMed:[33082341](#)).

Phospho-GATA6(Y271) Antibody - Protocols

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

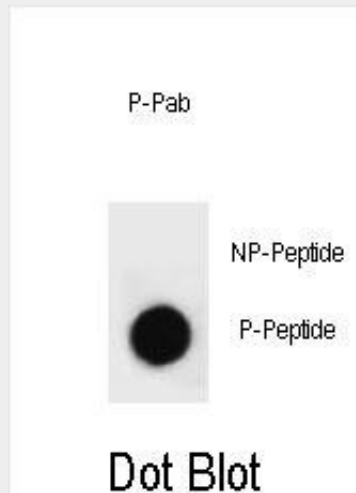
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-GATA6(Y271) Antibody - Images



Fluorescent confocal image of HepG2 cells stained with phospho-GATA6-Y271 antibody. HepG2 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AP3766a phospho-GATA6-Y271 primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody

(green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 5 min). Note the highly specific localization of the phospho-GATA6 immunosignal mainly to the nucleus.



Dot blot analysis of Phospho-GATA6-pY271 Phospho-specific Pab (Cat. #AP3766a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

Phospho-GATA6(Y271) Antibody - Background

Thought to be important for regulating terminal differentiation and/or proliferation.

Phospho-GATA6(Y271) Antibody - References

References for protein:

1. Artus, J., et al. *Development* 137(20):3361-3372(2010)
2. Lin, X., et al. *J. Hum. Genet.* 55(10):662-667(2010)
3. Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)
4. Thye, T., et al. *Nat. Genet.* 42(9):739-741(2010)
5. Johnatty, S.E., et al. *PLoS Genet.* 6 (7), E1001016 (2010)

References for HepG2 cell line:

1. Knowles BB, et al. (1980). Human hepatocellular carcinoma cell lines secrete the major plasma proteins and hepatitis B surface antigen. *Science* 209: 497-499.[PubMed: 6248960].
2. Darlington GJ, et al. (1987). Growth and hepatospecific gene expression of human hepatoma cells in a defined medium. *In Vitro Cell. Dev. Biol.* 23: 349-354.[PubMed: 3034851].
3. Ihrke, G; Neufeld, EB; Meads, T; Shanks, MR; Cassio, D; Laurent, M; Schroer, TA; Pagano, RE et al. (1993). "WIF-B cells: an in vitro model for studies of hepatocyte polarity". *Journal of Cell Biology* 123 (6): 1761-1775. [PubMed:7506266].
4. Mersch-Sundermann, V.; Knasmüller, S.; Wu, X. J.; Darroudi, F.; Kassie, F. (2004). "Use of a human-derived liver cell line for the detection of cytoprotective, antigenotoxic and cogenotoxic agents". *Toxicology* 198 (1-3): 329-340. [PubMed:15138059].