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Phospho-GATA6(Y271) Blocking Peptide

Synthetic peptide
Catalog # BP3766a

Specification

Phospho-GATA6(Y271) Blocking Peptide - Product Information

Primary Accession	Q92908
Other Accession	NP_005248.2

Phospho-GATA6(Y271) Blocking Peptide - Additional Information

Gene ID 2627

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

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.

Phospho-GATA6(Y271) Blocking Peptide - Protein Information

Name GATA6

Function
Transcriptional activator (PubMed:19666519, PubMed:27756709, PubMed:22750565, PubMed:22824924). 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) Blocking Peptide - Protocols

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

- Blocking Peptides

Phospho-GATA6(Y271) Blocking Peptide - Images

Phospho-GATA6(Y271) Blocking Peptide - Background

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

Phospho-GATA6(Y271) Blocking Peptide - 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].