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

PHF12 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP11130b

Specification

PHF12 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q96QT6

PHF12 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 57649

Other Names
PHD finger protein 12, PHD factor 1, Pf1, PHF12 (HGNC:20816)

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.

PHF12 Antibody (C-term) Blocking peptide - Protein Information

Name PHF12 (HGNC:20816)

Function
Transcriptional repressor acting as key scaffolding subunit of SIN3 complexes which contributes to complex assembly by contacting each core subunit domain, stabilizes the complex and constitutes the substrate receptor by recruiting the H3 histone tail (PubMed:37137925). SIN3 complexes are composed of a SIN3 scaffold subunit, one catalytic core (HDAC1 or HDAC2) and 2 chromatin targeting modules (PubMed:11390640, PubMed:37137925). SIN3B complex represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (PubMed:37137925). SIN3B complex is recruited downstream of the constitutively active genes transcriptional start sites through interaction with histones and mitigates histone acetylation and RNA polymerase II progression within transcribed regions contributing to the regulation of transcription (PubMed:21041482). May also repress transcription in a SIN3A- independent manner through recruitment of functional TLE5

complexes to DNA (PubMed:11390640). May also play a role in ribosomal biogenesis (By similarity).

Cellular Location
Nucleus.

PHF12 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

PHF12 Antibody (C-term) Blocking peptide - Images

PHF12 Antibody (C-term) Blocking peptide - Background

Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins.

PHF12 Antibody (C-term) Blocking peptide - References

Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006)Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006)Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)Yochum, G.S., et al. Mol. Cell. Biol. 22(22):7868-7876(2002)Yochum, G.S., et al. Mol. Cell. Biol. 21(13):4110-4118(2001)