

## KIAA1967 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP16400a

### **Specification**

## KIAA1967 Antibody (N-term) Blocking Peptide - Product Information

**Primary Accession** 

**08N163** 

# KIAA1967 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 57805** 

#### **Other Names**

Cell cycle and apoptosis regulator protein 2, Cell division cycle and apoptosis regulator protein 2, DBIRD complex subunit KIAA1967, Deleted in breast cancer gene 1 protein, DBC-1, DBC1, p30 DBC, CCAR2, DBC1, KIAA1967

#### **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.

# KIAA1967 Antibody (N-term) Blocking Peptide - Protein Information

Name CCAR2

Synonyms DBC1, KIAA1967

# **Function**

Core component of the DBIRD complex, a multiprotein complex that acts at the interface between core mRNP particles and RNA polymerase II (RNAPII) and integrates transcript elongation with the regulation of alternative splicing: the DBIRD complex affects local transcript elongation rates and alternative splicing of a large set of exons embedded in (A + T)-rich DNA regions (PubMed:<a href="http://www.uniprot.org/citations/22446626" target="\_blank">22446626</a>). Inhibits SIRT1 deacetylase activity leading to increasing levels of p53/TP53 acetylation and p53-mediated apoptosis (PubMed:<a href="http://www.uniprot.org/citations/18235501" target="\_blank">18235501</a>, PubMed:<a href="http://www.uniprot.org/citations/18235502" target="\_blank">18235501</a>, PubMed:<a href="http://www.uniprot.org/citations/23352644" target="\_blank">23352644</a>). Inhibits SUV39H1 methyltransferase activity (PubMed:<a href="http://www.uniprot.org/citations/19218236" target="\_blank">19218236</a>). Mediates ligand-dependent transcriptional activation by nuclear hormone receptors (PubMed:<a href="http://www.uniprot.org/citations/19131338" target="\_blank">19131338</a>, Plays a critical role in maintaining genomic stability and cellular integrity following UV-induced genotoxic



stress (PubMed:<a href="http://www.uniprot.org/citations/23398316" target=" blank">23398316</a>). Regulates the circadian expression of the core clock components NR1D1 and BMAL1 (PubMed: <a href="http://www.uniprot.org/citations/23398316" target=" blank">23398316</a>). Enhances the transcriptional repressor activity of NR1D1 through stabilization of NR1D1 protein levels by preventing its ubiquitination and subsequent degradation (PubMed: <a href="http://www.uniprot.org/citations/23398316" target=" blank">23398316</a>). Represses the ligand-dependent transcriptional activation function of ESR2 (PubMed: <a href="http://www.uniprot.org/citations/20074560" target=" blank">20074560</a>). Acts as a regulator of PCK1 expression and gluconeogenesis by a mechanism that involves, at least in part, both NR1D1 and SIRT1 (PubMed: <a href="http://www.uniprot.org/citations/24415752" target=" blank">24415752</a>). Negatively regulates the deacetylase activity of HDAC3 and can alter its subcellular localization (PubMed: <a href="http://www.uniprot.org/citations/21030595" target=" blank">21030595</a>). Positively regulates the beta-catenin pathway (canonical Wnt signaling pathway) and is required for MCC-mediated repression of the beta-catenin pathway (PubMed:<a href="http://www.uniprot.org/citations/24824780" target=" blank">24824780</a>). Represses ligand-dependent transcriptional activation function of NR1H2 and NR1H3 and inhibits the interaction of SIRT1 with NR1H3 (PubMed:<a href="http://www.uniprot.org/citations/25661920" target=" blank">25661920</a>). Plays an important role in tumor suppression through p53/TP53 regulation; stabilizes p53/TP53 by affecting its interaction with ubiquitin ligase MDM2 (PubMed: <a href="http://www.uniprot.org/citations/25732823" target=" blank">25732823</a>). Represses the transcriptional activator activity of BRCA1 (PubMed:<a href="http://www.uniprot.org/citations/20160719" target=" blank">20160719</a>). Inhibits SIRT1 in a CHEK2 and PSEM3-dependent manner and inhibits the activity of CHEK2 in vitro (PubMed:<a href="http://www.uniprot.org/citations/25361978" target=" blank">25361978</a>).

#### **Cellular Location**

Nucleus. Cytoplasm. Cytoplasm, cytoskeleton, spindle. Note=Recruited to chromatin, post-UV irradiation. Sequestered to the cytoplasm in the presence of MCC. Translocated to the cytoplasm during UV-induced apoptosis.

#### **Tissue Location**

Expressed in gastric carcinoma tissue and the expression gradually increases with the progression of the carcinoma (at protein level). Expressed ubiquitously in normal tissues. Expressed in 84 to 100% of neoplastic breast, lung, and colon tissues

## KIAA1967 Antibody (N-term) Blocking Peptide - Protocols

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

# • Blocking Peptides

KIAA1967 Antibody (N-term) Blocking Peptide - Images

# KIAA1967 Antibody (N-term) Blocking Peptide - Background

KIAA1967 inhibits SIRT1 deacetylase activity leading to increasing levels of p53/TP53 acetylation and p53-mediated apoptosis. Inhibits SUV39H1 methyltransferase activity.

## KIAA1967 Antibody (N-term) Blocking Peptide - References

Hiraike, H., et al. Br. J. Cancer 102(6):1061-1067(2010)Escande, C., et al. J. Clin. Invest. 120(2):545-558(2010)Kim, J.E., et al. Cell Cycle 8(18):2932-2935(2009)Cha, E.J., et al. Clin. Cancer Res. 15(13):4453-4459(2009)Li, Z., et al. J. Biol. Chem. 284(16):10361-10366(2009)