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

Goat Anti-CCAR2 / DBC1 Antibody (internal region)

Purified Goat Polyclonal Antibody
Catalog # AF4196a

Specification

Goat Anti-CCAR2 / DBC1 Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	Q8N163
Other Accession	219158(mouse), 306007(rat), NP_066997.3
Reactivity	**Human**
Predicted	**Human, Mouse, Rat, Pig, Cow, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5**
Calculated MW	**102902**

Goat Anti-CCAR2 / DBC1 Antibody (internal region) - Additional Information

Gene ID 57805

Other Names
CCAR2; cell cycle and apoptosis regulator 2; DBC-1; DBC1; KIAA1967; NET35; p30 DBC; p30DBC; cell cycle and apoptosis regulator protein 2; cell division cycle and apoptosis regulator protein 2; deleted in breast cancer 1; p30 DBC protein

Format
Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen
Peptide with sequence C-ESHNRFSATEVTNK, from the internal region of the protein sequence according to NP_066997.3.

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
Goat Anti-CCAR2 / DBC1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CCAR2 / DBC1 Antibody (internal region) - 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:22446626). Inhibits SIRT1 deacetylase activity leading to increasing levels of p53/TP53 acetylation and p53-mediated apoptosis (PubMed:18235501, PubMed:18235502, PubMed:23352644). Inhibits SUV39H1 methyltransferase activity (PubMed:19218236). Mediates ligand-dependent transcriptional activation by nuclear hormone receptors (PubMed:19131338). Plays a critical role in maintaining genomic stability and cellular integrity following UV-induced genotoxic stress (PubMed:23398316). Regulates the circadian expression of the core clock components NR1D1 and BMAL1 (PubMed:23398316). Enhances the transcriptional repressor activity of NR1D1 through stabilization of NR1D1 protein levels by preventing its ubiquitination and subsequent degradation (PubMed:23398316). Represses the ligand-dependent transcriptional activation function of ESR2 (PubMed:20074560). Acts as a regulator of PCK1 expression and gluconeogenesis by a mechanism that involves, at least in part, both NR1D1 and SIRT1 (PubMed:24415752). Negatively regulates the deacetylase activity of HDAC3 and can alter its subcellular localization (PubMed:21030595). Positively regulates the beta-catenin pathway (canonical Wnt signaling pathway) and is required for MCC-mediated repression of the beta-catenin pathway (PubMed:24824780). Represses ligand-dependent transcriptional activation function of NR1H2 and NR1H3 and inhibits the interaction of SIRT1 with NR1H3 (PubMed:25661920). Plays an important role in tumor suppression through p53/TP53 regulation; stabilizes p53/TP53 by affecting its interaction with ubiquitin ligase MDM2 (PubMed:25732823). Represses the transcriptional activator activity of BRCA1 (PubMed:20160719). Inhibits SIRT1 in a CHEK2 and PSEM3-dependent manner and inhibits the activity of CHEK2 in vitro (PubMed:25361978).

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

Goat Anti-CCAR2 / DBC1 Antibody (internal region) - Protocols

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

- Western Blot

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- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-CCAR2 / DBC1 Antibody (internal region) - Images

AF4196a (0.5 µg/ml) staining of HEK293 (A) and MCF7 (B) nuclear lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CCAR2 / DBC1 Antibody (internal region) - References

The overexpression of DBC1 in esophageal squamous cell carcinoma correlates with poor prognosis. Kim SH, Kim JH, Yu EJ, Lee KW, Park CK. Histology and histopathology 2012 Jan 27 (1): 49-58.