

## CCDC134 Antibody

Catalog # ASC10944

### Specification

## CCDC134 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O9H6E4</u> <u>NP\_079097</u>, <u>13376216</u> Human, Mouse, Rat Rabbit Polyclonal IgG CCDC134 antibody can be used for detection of CCDC134 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

## CCDC134 Antibody - Additional Information

Gene ID Target/Specificity CCDC134;

# Reconstitution & Storage

CCDC134 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

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#### Precautions

CCDC134 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## CCDC134 Antibody - Protein Information

#### Name CCDC134 {ECO:0000303|PubMed:39509507, ECO:0000312|HGNC:HGNC:26185}

#### Function

Molecular adapter required to prevent protein hyperglycosylation of HSP90B1: during translation, associates with nascent HSP90B1 and the STT3A catalytic component of the OST-A complex and tethers them to a specialized translocon that forms a microenvironment for HSP90B1 folding (PubMed:<a href="http://www.uniprot.org/citations/38670073" target="\_blank">38670073</a>, PubMed:<a href="http://www.uniprot.org/citations/39509507" target="\_blank">39509507</a>). In the CCDC134-containing translocon, STT3A associates with the SRT pseudosubstrate motif of HSP90B1, preventing access to facultative glycosylation sites until folding is completed, preventing hyperglycosylation and subsequent degradation of HSP90B1 (PubMed:<a href="http://www.uniprot.org/citations/39509507" target="\_blank">39509507</a>). In



extracellular secreted form, promotes proliferation and activation of CD8(+) T-cells, suggesting a cytokine- like function (PubMed:<a href="http://www.uniprot.org/citations/25125657" target="\_blank">25125657</a>). May inhibit ERK and JNK signaling activity (PubMed:<a href="http://www.uniprot.org/citations/18087676" target="\_blank">18087676</a>, PubMed:<a href="http://www.uniprot.org/citations/23070808" target="\_blank">23070808</a>). May suppress cell migration and invasion activity, via its effects on ERK and JNK signaling (PubMed:<a href="http://www.uniprot.org/citations/23070808" target="\_blank">23070808</a>). May also localize in the nucleus: enhances stability of the PCAF histone acetyltransferase (HAT) complex member TADA2A and thus promotes PCAF-mediated histone acetyltransferase activity (PubMed:<a href="http://www.uniprot.org/citations/22644376" target="\_blank">22644376</a>). Has a critical role in the regulation of osteogenesis and bone development (PubMed:<a href="http://www.uniprot.org/citations/228181939" target="\_blank">22644376</a>).

#### **Cellular Location**

Endoplasmic reticulum lumen. Secreted. Cytoplasm Nucleus. Note=Mainly localizes to the endoplasmic reticulum (PubMed:39509507). Accumulates in the nucleus in response to UV irradiation (PubMed:22644376)

#### **Tissue Location**

Expressed in cervical gland, cervical squamous epithelium, endometrium, stomach, kidney distal convoluted tubule, spermatogenic cells in testis, mammary gland, liver and striated muscle (at protein level) (PubMed:18087676, PubMed:23070808). Also detected in placenta (PubMed:18087676). Highest expression in testis relative to other tissues (PubMed:18087676). Detected in T cells and dendritic cells; highly expressed in activated CD8(+) T cells, and also expressed at lower levels in CD4(+) T cells (PubMed:25125657)

#### CCDC134 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 Cytomety
- <u>Cell Culture</u>

CCDC134 Antibody - Images



Western blot analysis of CCDC134 in rat brain tissue lysate with CCDC134 antibody at (A) 1 and



## (B) 2 μg/mL.



Immunohistochemistry of CCDC134 in human brain tissue with CCDC134 antibody at 2.5 µg/mL.



Immunofluorescence of CDCC134 in human brain tissue with CDCC134 antibody at 20  $\mu$ g/mL.

## CCDC134 Antibody - Background

CCDC134 Antibody: The coiled-coil domain is a common protein motif that is often involved in protein oligomerization and is found in proteins such as transcription factors and intermediate filaments. One such protein is CCDC134, a recently identified secretory protein that has been found to inhibit the transcriptional activity of the Elk1 protein. Overexpression CCDC134 also inhibited the phosphorylation of Erk and JNK/SAPK but not p38 MAPK, while specific siRNA against CCDC134 activated Elk1 transcriptional activity and the phosphorylation of Erk and JNK/SAPK, suggesting a potential inhibiting role of CCDC134 in MAPK-mediated Elk1 transcription. CCDC134 is widely expressing in normal adult tissues, tumors, and cell lines.

## **CCDC134 Antibody - References**

Steinmetz MO, Jelesarov I, Matousek WM, et al. Molecular basis of coiled-coil formation. Proc. Natl. Acad. Sci. USA2007; 104:7062-7.

Huang J, Shi T, Ma T, et al. CCDC134, a novel secretory protein, inhibits activation of ERK and JNK, but not p38 MAPK. Cell. Mol. Life Sci.2008; 65:338-49.