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# CCDC134 Antibody

Catalog # ASC10944

## Product Information

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| **Application** | WB, IF, E, IHC-P |
| **Primary Accession** | Q9H6E4 |
| **Other Accession** | NP_079097, 13376216 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 26561 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | CCDC134 antibody can be used for detection of CCDC134 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL. |

## Additional Information

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| **Gene ID** | 79879 |
| **Other Names** | Coiled-coil domain-containing protein 134, CCDC134 |
| **Target/Specificity** | CCDC134; |
| **Reconstitution & Storage** | CCDC134 antibody can be stored at 4℃ for three months and -20℃, 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. |
| **Precautions** | CCDC134 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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:38670073, PubMed:39509507). 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:39509507). In extracellular secreted form, promotes proliferation |

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| | and activation of CD8(+) T-cells, suggesting a cytokine- like function (PubMed:25125657). May inhibit ERK and JNK signaling activity (PubMed:18087676, PubMed:23070808). May suppress cell migration and invasion activity, via its effects on ERK and JNK signaling (PubMed:23070808). 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:22644376). Has a critical role in the regulation of osteogenesis and bone development (PubMed:32181939). |
| **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) |

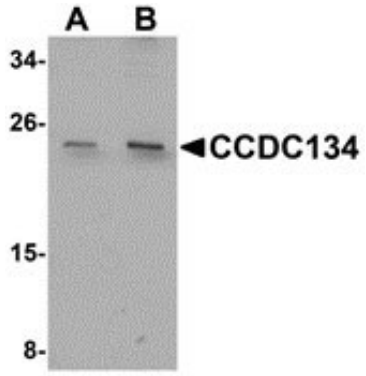
## Background

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.

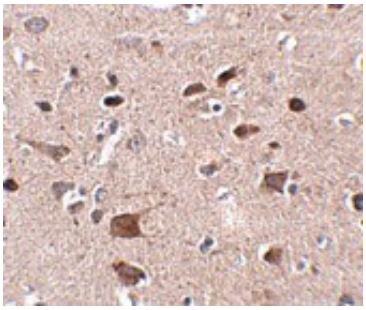
## References

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.

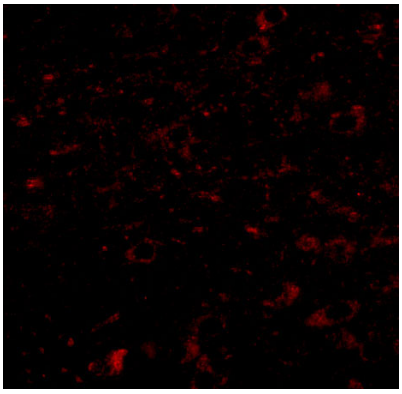
## Images




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 µg/mL.