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

# CCDC22 Rabbit pAb

CCDC22 Rabbit pAb
Catalog # AP58884

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | O60826 |
| **Reactivity** | Rat |
| **Predicted** | Pig, Dog, Human, Mouse, Horse, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 70756 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from Human CCDC22 |
| **Epitope Specificity** | 525-627/627 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **DISEASE** | Note=May be involved in X-linked syndromic mental retardation (PubMed:21826058). CCDC22 expression has been found to be down-regulated in a family with a phenotype consistent with X-linked syndromic mental retardation, and carrying variant Ala-17. In addition to intellectual disability, affected individuals have cardiac and skeletal abnormalities. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | This gene encodes a protein containing a coiled-coil domain. The mouse orthologous protein has been shown to bind copines, which are calcium-dependent, membrane-binding proteins that may function in calcium signaling. Localization of the orthologous rat protein suggests that it may play a role in neuronal injury response. This human gene has been identified as a novel candidate gene for syndromic X-linked intellectual disability. [provided by RefSeq, Aug 2011]. |

## Additional Information

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| **Gene ID** | 28952 |
| **Other Names** | Coiled-coil domain-containing protein 22, CCDC22, CXorf37 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | CCDC22 |
| **Synonyms** | CXorf37 |
| **Function** | Component of the commander complex that is essential for endosomal recycling of transmembrane cargos; the Commander complex is composed of composed of the CCC subcomplex and the retriever subcomplex (PubMed:37172566, PubMed:38459129). Component of the CCC complex, which is involved in the regulation of endosomal recycling of surface proteins, including integrins, signaling receptor and channels (PubMed:37172566, PubMed:38459129). Involved in regulation of NF-kappa- B signaling (PubMed:23563313). Promotes ubiquitination of I-kappa-B- kinase subunit IKBKB and its subsequent proteasomal degradation leading to NF-kappa-B activation; the function may involve association with COMMD8 and a CUL1-dependent E3 ubiquitin ligase complex (PubMed:23563313). May down-regulate NF-kappa-B activity via association with COMMD1 and involving a CUL2-dependent E3 ubiquitin ligase complex. Regulates the cellular localization of COMM domain- containing proteins, such as COMMD1 and COMMD10 (PubMed:23563313). Component of the CCC complex, which is involved in the regulation of endosomal recycling of surface proteins, including integrins, signaling receptor and channels. The CCC complex associates with SNX17, retriever and WASH complexes to prevent lysosomal degradation and promote cell surface recycling of numerous cargos such as integrins ITGA5:ITGB1 (PubMed:25355947, PubMed:28892079). Plays a role in copper ion homeostasis (PubMed:25355947). Involved in copper-dependent ATP7A trafficking between the trans-Golgi network and vesicles in the cell periphery; the function is proposed to depend on its association within the CCC complex and cooperation with the WASH complex on early endosomes (PubMed:25355947). |
| **Cellular Location** | Endosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome |
| **Tissue Location** | Widely expressed in adult tissues and in fetal liver and brain, with highest levels in prostate and lowest in skeletal muscle. |

## Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.