

Product datasheet for MC208996

Commd1 (NM_144514) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Commd1 (NM_144514) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Commd1
Synonyms:	AI256843; Murr1; U2/Mu
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208996 representing NM_144514 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCGGGCGATCTGGAGGGTGGCAAGTCCCTGAGCGGGCTGCTGAGCGGCCTAGCGCAGAACGCCTTTC
 ACGGACACTCGGGTGTCACGGAGGAGCTGCTGCACAGCCAATCTATCCGGAAGTGCCACCGGAGGAGTT
 CCGCCCCCTTCTGGCGAAGATGAGAGGACTTCTCAAGTCTATTGCATCTGCAGACATGGATTTCAACCAG
 TTAGAGGCATTCCTGACTGCTCAAACCAAAAAGCAAGGTGGCATCACCAGTGAGCAAGCTGCAGTCATCT
 CCAAGTTTGGAAAGAGCCACAAGATAAAAATCCGAGAGAGTCTCATGAAGCAGAGCCGCTGGGACAACGG
 CCTTCGGGGCCTGAGCTGGAGAGTCGATGGCAAGTCTCAGTCACGGCACTCAACTCAGATACACAGCCCT
 GTTGCCATAATAGAGCTGGAATTTGAAAAAATGGACAGGAATCTGAATTTTGTGTCTGGAATTTGATG
 AAGTTAAAGTCAAGCAAATCCTGAAGAAGCTGTCAGAGGTAGAAGAGAGTATCAACAGGCTGATGCAGGC
 AGCCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_144514
Insert Size:	567 bp


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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_144514.2](#), [NP_653097.2](#)

RefSeq Size: 818 bp

RefSeq ORF: 567 bp

Locus ID: 17846

UniProt ID: [Q8K4M5](#)

Cytogenetics: 11 14.22 cM

Gene Summary:

Proposed scaffold protein that is implicated in diverse physiological processes and whose function may be in part linked to its ability to regulate ubiquitination of specific cellular proteins. Can modulate activity of cullin-RING E3 ubiquitin ligase (CRL) complexes by displacing CAND1; in vitro promotes CRL E3 activity and dissociates CAND1 from CUL1 and CUL2. Promotes ubiquitination of NF-kappa-B subunit RELA and its subsequent proteasomal degradation. Down-regulates NF-kappa-B activity. Involved in the regulation of membrane expression and ubiquitination of SLC12A2. Modulates Na(+) transport in epithelial cells by regulation of apical cell surface expression of amiloride-sensitive sodium channel (ENaC) subunits and by promoting their ubiquitination presumably involving NEDD4L. Promotes the localization of SCNN1D to recycling endosomes. Promotes CFTR cell surface expression through regulation of its ubiquitination. Down-regulates SOD1 activity by interfering with its homodimerization. Plays a role in copper ion homeostasis. 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. Can bind one copper ion per monomer. May function to facilitate biliary copper excretion within hepatocytes. Binds to phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2). Involved in the regulation of HIF1A-mediated transcription; competes with ARNT/Hif-1-beta for binding to HIF1A resulting in decreased DNA binding and impaired transcriptional activation by HIF-1. Negatively regulates neuroblastoma G1/S phase cell cycle progression and cell proliferation by stimulating ubiquitination of NF-kappa-B subunit RELA and NF-kappa-B degradation in a FAM107A- and actin-dependent manner. [UniProtKB/Swiss-Prot Function]