

Product datasheet for **MG222585**

Commd1 (NM_144514) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Commd1 (NM_144514) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Commd1
Synonyms: AI256843; Murr1; U2/Mu
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG222585 representing NM_144514
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGCGATCTGGAGGGTGGCAAGTCCCTGAGCGGGCTGCTGAGCGGCCTAGCGCAGAACGCCTTTC
ACGGACTCGGGTGTACCGGAGGAGCTGCTGCACAGCCAACCTATCCGGAAGTGCCACCGGAGGAGTT
CCGCCCTTCTGGCGAAGATGAGAGGACTTCTCAAGTCTATTGCATCTGCAGACATGGATTCAACCAG
TTAGAGGCATTCTGACTGCTCAAACAAAAAGCAAGGTGGCATCACCAGTGAGCAAGCTGCAGTCATCT
CCAAGTTTTGGAAGAGCCACAAGATAAAAAATCCGAGAGAGTCTCATGAAGCAGAGCCGCTGGACAACGG
CCTTCGGGGCCTGAGCTGGAGAGTCGATGGCAAGTCTCAGTACCGCACTCAACTCAGATACACAGCCCT
GTTGCCATAATAGAGCTGGAATTTGAAAAAATGGACAGGAATCTGAATTTTGTGTCTGGAATTTGATG
AAGTTAAAGTCAAGCAAATCCTGAAGAAGCTGTGAGAGGTAGAAGAGAGTATCAACAGGCTGATGCAGGC
AGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222585 representing NM_144514
Red=Cloning site Green=Tags(s)

MAGDLEGGKSLGLLSGLAQNAFHGHSVTEELLHSQLYPEVPPEEFRPFLAKMRGLLKSIASADMDFNQ
LEAFLTAQTKKQGGITSEQAAVISKFWKSHKIKIRESLMKQSRWDNGLRGLSWRVDGKSQSRHSTQIHSP
VAIELEFGKNGQESEFLCLEFDEVKVKQILKKLSEVEESINRLMQAA

TRTRPLE - GFP Tag - V

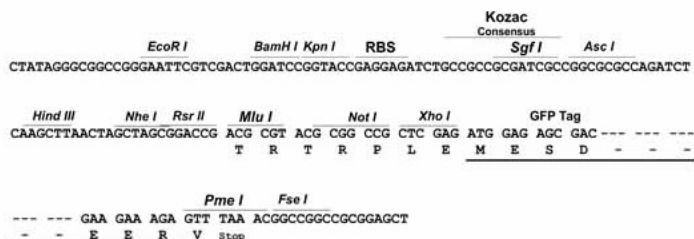
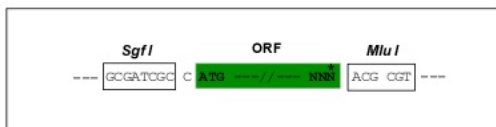
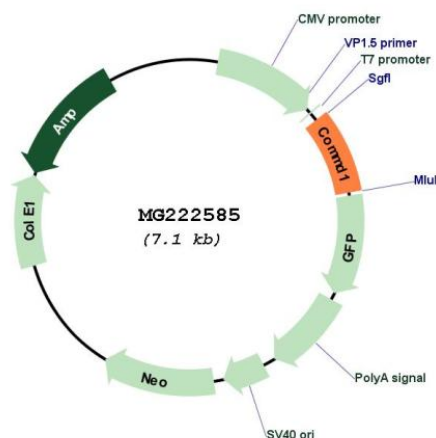
Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:

Cloning sites used for ORF Shutting:


Plasmid Map:


ACCN: NM_144514

ORF Size: 564 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

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]