

Product datasheet for **MG227649**

Cblb (NM_001033238) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cblb (NM_001033238) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cblb
Synonyms:	AI429560; AI851073; Cbl-b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227649 representing NM_001033238
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAAATTCATGAATGGCAGAAATCCTGGTGGTCGAGGAGGAAACCCCGCAAAGGTCGCATTTTGG
 GGATTATTGATGCTATTCAGGATGCAGTCGGACCCCAAAGCAAGCTGCAGCTGACCGCAGGACTGTGGA
 GAAGACTTGAAAACCTCATGGACAAAGTGGTAAGACTGTGCCAAAAATCCCAAGCTTCAGTTGAAAAACAGC
 CCACCGTATATACTTGATATTTTACCTGATACGTATCAGCACTTGAGACTTATATTGAGTAAATATGATG
 ACAACCAGAAGCTGGCTCAACTGAGCGAGAATGAGTACTTTAAAACTACATCGATAGTCTCATGAAGAA
 GTCGAAGCGAGCGATCCGGCTCTTTAAAGAAGGCAAGGAAAGGATGTACGAAGAGCAGTCGCAGGACAGA
 CGGAATCTCACAAGCTGTCCCTTATCTTCAGTCACATGCTGGCAGAAATCAAGGCGATCTTTCCCAATG
 GCCAGTCCAGGGAGATAACTTCCGGATACCAAAGCAGATGCTGCTGAGTTCGGAGGAAGTTTTTTGG
 AGACAAAATATTGTACCATGGAAGTCTTCAGACAGTGCCTGCATGAGGTCCATCAGATCAGCTCTGGC
 CTGGAAGCAATGGCTCTGAAGTCAACCATTGATTTAACTTGAATGATTACATCTCAGTGTTTGAATTTG
 ATATTTTTACCAGGCTATTTACGCCCTGGGGCTCTATTTACGGAATTGGAACCTCTTGGCTGTGACTCA
 CCCGGGATACATGGCATTCTCACGTATGATGAAGTAAAGCTCGGCTACAGAAATACAGCACCAGCCT
 GGAAGTTACATTTCCGGTTAAGCTGCACTCGGCTGGGACAAATGGGCCATTGGCTATGTGACTGGGGACG
 GCAATATCCTACAGACCATACCTCATAACAAGCCCCTGTTCCAAGCCCTGATTGATGGTAGCAGGGAAAGG
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 GATCATATAAAAGTTACACAGGAGCAGTATGAAGTGTATTGTGAAATGGGCTCCACTTTTCAGCTCTGCA
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 TACCGCGTGGCAGGAGTCTGATGGCCAAGCTGCCCTTCTGTCGCTGTGAGATAAAAGGAACGGAGCCC
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 TCCCCATGCTTGACTTGGACGATGACGATGATCGAGAGGAGTCTTTGATGATGAACAGGCTGGCAGTGT
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 AAGCCTCAGCCAGACCCTCTCCAGATCCCCACCTCAGCCTGCCACCAGTGCCTCCCCGCCTAGATCTCA
 TTCAGAAAGGCATCGTGCCTCTCCGTGTGGCAGCCCCACAGGCTCGCCAAAGTCTTCTCCATGCATGGT
 TAGAAAACAAGACAACCACTCCCGGCACCCCTCCTCCCTTGAGAGATCCACCTCCTCCACCAGAGAGG
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 ACCAGCCCATGCCCTCGAAGCCTGGTGCCTCGGGATGCCTTCGGGACTAACCGGTGATGGGATGTCG
 CATCCTCGGGGATGGCTCTCAAAGCCTGGCGTCAACGCAAACCTCCAGCTTAAATGGGAGGCACAGTAGA
 ATGGGCTCCGAGCAGGTTCTTATGAGGAAACACAGACGCCATGATTTGCCTTCAGAAGGAGCCAAGGTCT
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 ATTGCCATAATGTCAAAGCTCCTGTTCCGGTCTTGTGATAATGGTCATTGTATATTGAATGGAACCTATGG
 TGCGCCTTCAGAGATGAAGAAATCGAACATCCCAGATTTAGGCATCTATTTGAAGGGTGAAGAGCCTTT
 GATGCTCTCCCTCCATCCCTCCCTCCTCCCCACCTCCTGCAAGACACAGTCTCATCGAACATTCAAAC
 CTCCAGGCTCCAGTAGCCGGCCTTCTCAGGGCAGGACCTTTTCTTCTTCTCAGATCCCTTTTTTTGA
 CCCAACAAAGTGGCCAAGTTCCATTGCTCCTGCCAGGAGAGCAGCAGGAGACAGCGGCAAAGCCAACAGA
 GCCTCGCAGGACTATGACCAGCTCCCTTCTTCCGATGGTTCCGAAGCACCAGCTAGACCCCCAAAC
 CACGACCCGAAGGACTGCACCAGAAATTCATCACAGAAAGCCCATGGGCCGAAGCGGCTTGGAAAA
 TGTGATGCAAAAATTGCAAACTCATGGGAGAGGGGTATGCCTTTGAAGAGGTGAAGAGCCTTAGAG
 ATTGCCAGAATAACGTGGAAGTGGCCAGGAGCATACTTCGAGAATTTGCCTTCCCCCTCTGTCTCC
 CACGTCTGAATCTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG227649 representing NM_001033238
 Red=Cloning site Green=Tags(s)

MANSMNGRNPGGRGGNPRKGRILGIIDAIQDAVGPPKQAAADRRTVEKTWKLMDKVVRLCQNPQLQLKNS
 PPYILDILPDTYQHLRLILSKYDDNQKLAQLSENEYFKIYIDSLMKKSKRAIRLFKEGKERMYYEQSODR
 RNLTKLSLIFSHMLAEIKAIIFPNGQFQGDNFRIKADAAEFWRKFFGDKTIVPWKVFQCLHEVHQISSG
 LEAMALKSTIDLTCNDYISVFEFDIFTRLFQPWGSILRNWNFLAVTHPGYMAFLTYDEVKARLQKYSTKP
 GSYIFRLSCTRLGQWAIGYVTGDGNILQTI PHNKPLFQALIDGSREGFYLYPDGRSYNPDLTGLCEPTH
 DHIKVTQEYELYCEMGSTFQLCKICAENDKDKVIEPCGHLMCTSCLTAWQESDQGQPCFRCCEIKGTEP
 IIVDPFDPREDESRCCSIIDPFSIPMLDLDDDDREESLMNRLASVRKCTDRQNSPVTSPGSSPLAQR
 KPQPDPLQIPLSLPPVPPRLDLIQKGI VRSPCGSPTGSPKSSPCMV RKQDKPLAPPPPLRDP PPPPER
 PPPIPDNRLSRHFHHGESVPSRDQPMPL EAWCP RDAFGTNQVMGCRILGDGSPKPGVTANSSLNGRHSR
 MGSEQVLMRKHRRHDL PSEGAKVFSNGHLATEEYDVPPRLSPPPPVTLLPSIKCTGPLANCLSEKTRDT
 VEDDDDEYKIPSSHPVLSNSQPSHCHNVKAPVRSCDNHCILNGTHGAPSEMKKSNIPDLGIYLGEDAF
 DALPPSLPPPPPARHSLIEHSPKPPGSSSRPSSGQDLFLLPSDPFFDPTSGQVPLPPARRAAGDSGKANR
 ASQDYDQLPSSSDGSQAPARPPKPRRRTAPEIHRKPHGPEAALENDAKIAKLMGEGYAFEEVKRALE
 IAQNNVEVARSILREFAFPPVSPRLNL

TRTRPLE – GFP Tag – V

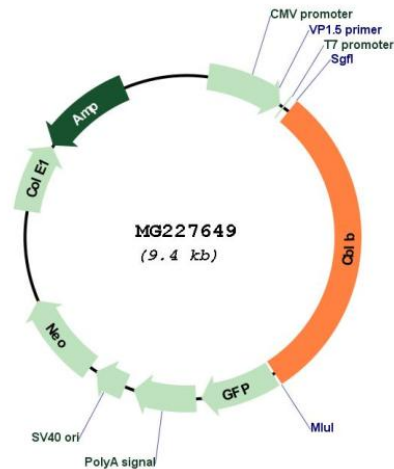
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001033238

ORF Size: 2814 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_001033238.1](#), [NP_001028410.1](#)

RefSeq Size: 6323 bp

RefSeq ORF: 2817 bp

Locus ID: 208650

UniProt ID: [Q3TTA7](#)

Cytogenetics: 16 B5

Gene Summary:

E3 ubiquitin-protein ligase which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and transfers it to substrates, generally promoting their degradation by the proteasome. Negatively regulates TCR (T-cell receptor), BCR (B-cell receptor) and FCER1 (high affinity immunoglobulin epsilon receptor) signal transduction pathways. In naive T-cells, inhibits VAV1 activation upon TCR engagement and imposes a requirement for CD28 costimulation for proliferation and IL-2 production. Also acts by promoting PIK3R1/p85 ubiquitination, which impairs its recruitment to the TCR and subsequent activation. In activated T-cells, inhibits PLCG1 activation and calcium mobilization upon restimulation and promotes energy. In B-cells, acts by ubiquitinating SYK and promoting its proteasomal degradation. Slightly promotes SRC ubiquitination. May be involved in EGFR ubiquitination and internalization. May be functionally coupled with the E2 ubiquitin-protein ligase UB2D3. In association with CBL, required for proper feedback inhibition of ciliary platelet-derived growth factor receptor-alpha (PDGFRA) signaling pathway via ubiquitination and internalization of PDGFRA (PubMed:29237719).[UniProtKB/Swiss-Prot Function]