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Product datasheet for MR227649

Cblb (NM_001033238) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cblb (NM_001033238) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cblb
Synonyms:	AI429560; AI851073; Cbl-b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR227649 representing NM_001033238
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAAATTCTATGAATGGCAGAAATCCTGGTGGTCGAGGAGGAAACCCCCGCAAAGGTCGCATTTTGG
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GAAGACTTGGAAACTCATGGACAAAGTGGTAAGACTGTGCCAAAATCCCAAGCTTCAGTTGAAAAACAGC
CCACCGTATATACTTGATATTTTACCTGATACGTATCAGCACTTGAGACTTATATTGAGTAAATATGATG
ACAACCAGAAGCTGGCTCAACTGAGCGAGAATGAGTACTTTAAAATCTACATCGATAGTCTCATGAAGAA
GTCGAAGCGAGCGATCCGGCTCTTTAAAGAAGGCAAGGAAAGGATGTACGAAGAGCAGTCGCAGGACAGA
CGGAATCTCACAAAGCTGTCCCTTATCTTCAGTCACATGCTGGCAGAAATCAAGGCGATCTTTCCCAATG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227649 representing NM_001033238
Red=Cloning site Green=Tags(s)

MANSMNGRNPGGRGGNPRKGRILGIIDAIQDAVGPPKQAAADRRTVEKTWKLMDKVVRLCQNPKLQLKNS
PPYILDILPDTYQHLRLILSKYDDNQKLAQLSENEYFKIYIDSLMKKSKRAIRLFKEGKERMYEEQSQDR
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KPQPDPLQIPHLSLPPVPPRLDLIQKGIVRSPCGSPTGSPKSSPCMVRKQDKPLPAPPPPLRDPPPPPER
PPPIPPDNRLSRHFHHGESVPSRDQPMPLEAWCPRDAFGTNQVMGCRILGDGSPKPGVTANSSLNGRHSR
MGSEQVLMRKHRRHDLPSEGAKVFSNGHLATEEYDVPPRLSPPPPVTTLLPSIKCTGPLANCLSEKTRDT
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DALPPSLPPPPPPARHSLIEHSKPPGSSSRPSSGQDLFLLPSDPFFDPTSGQVPLPPARRAAGDSGKANR
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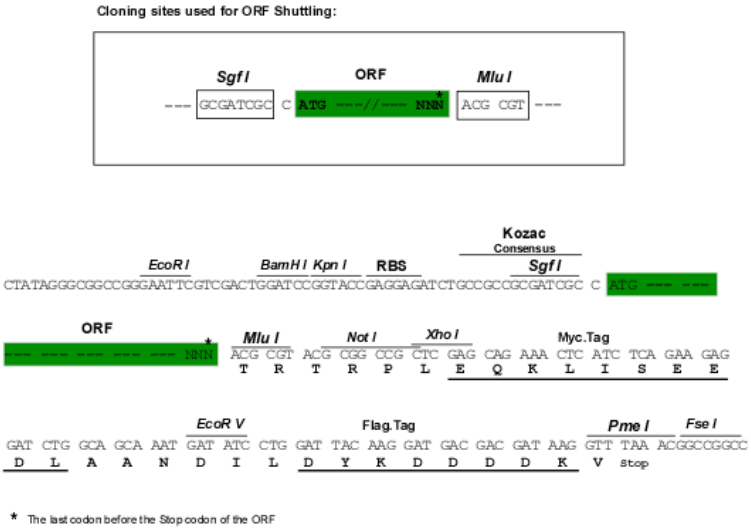
IAQNNVEVARSILREFAFPPPVSPRLNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1656_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

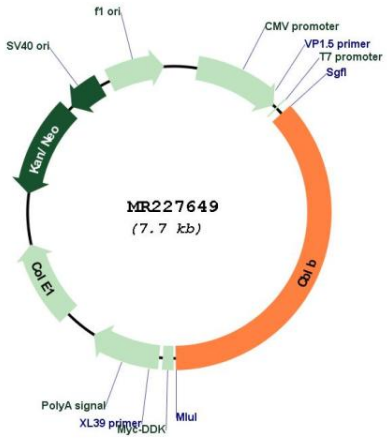


ACCN: NM_001033238

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
MW:	105 kDa
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 anergy. 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]

Product images:



Circular map for MR227649