

Product datasheet for **RC223013**

CD10 (MME) (NM_000902) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD10 (MME) (NM_000902) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD10
Synonyms:	CALLA; CD10; CMT2T; NEP; SCA43; SFE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223013 representing NM_000902
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCAAGTCAGAAAGTCAGATGGATATAACTGATATCAACACTCCAAAGCCAAAGAAGAAACAGCGAT
 GGAATCCACTGGAGATCAGCCTCTCGGTCTTGCTGCTCCTCACCATCATAGCTGTGACAATGATCGC
 ACTCTATGCAACCTACGATGATGGTATTTGCAAGTCATCAGACTGCATAAAATCAGCTGCTCGACTGATC
 CAAAACATGGATGCCACCACTGAGCCTTGACAGACTTTTTCAAATATGCTTGCGGAGGCTGGTTGAAAC
 GTAATGTCATTCCCGAGACCAGCTCCCCTTACGGCAACTTTGACATTTAAGAGATGAACTAGAAGTCGT
 TTTGAAAGATGTCCTTCAAGAACCACAACTGAAGATATAGTAGCAGTGCAGAAAGCAAAAGCATTGTAC
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 GCACTGGAATCTATAAGAGGCTTGTACAGCATATGTGGATTTTATGATTCTGTGGCCAGATTGATTCCG
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 CATTGGCCAGATCCAAAATAACTTTTCACTAGAGATCAATGGGAAGCCATTGAGCTGGTTGAATTTAC
 AAATGAAATCATGTCAACTGTGAATATTAGTATTACAAATGAGGAAGATGTGGTTGTTTATGCTCCAGAA
 TATTTAACCAAATTAAGCCATTCTTACCAAATATTCTGCCAGAGATCTTCAAATTTAATGCTCCTGGA
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 CCTTTATGGTACAACCTCAGAAACAGCAACTTGGAGACGTTGTGCAAACTATGTCAATGGGAATATGGAA
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 AACAACTGAATAATGAGTACCTCGAGTTGAACTACAAAGAAGATGAATACTTCGAGAACATAATTCAA
 ATTTGAAATTCAGCCAAAGTAAACAAGTGAAGAAGCTCCGAGAAAAGGTGGACAAAGATGAGTGGATAAG
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 CAGCCCCCTTTTATGTCAGCAGTCCAACCTATTGAACTATGGGGCATCGGCATGGTTCATAGGAC
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 GAGTATGCGGTAACTCCATTAACAGATGTGCACAGTCCAGGCAATTTAGGATTATTGGGACTTTGC
 AGAACTCTGCAGATTTTCAGAAGCCTTCACTGCCGCAAGAATTCATACATGAATCCAGAAAAGAAGTG
 CCGGGTTTGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223013 representing NM_000902
 Red=Cloning site Green=Tags(s)

MGKSESQMDITDINTPKPKKKQRWTPLEISLSVLVLLLTIIAVTMIALYATYDDGICKSSDCIKSAARLI
 QNMDATTEPCTDFFKYACGGWLKRNVIPETSSRYGNFDILRDELEVVLKDVLPQPKTEDIVAVQKAKALY
 RSCINESAIDSRGGEPLLKLLPDIYGWVATENWEQKYGASWTAEKAIQNLNSKYGKVLINLFGVTDDK
 NSVNHVIHIDQPRGLPSRDYECTGIYKEACTAYVDFMISVARLIRQEERLPIDENQLALEMNKVMELE
 KEIANATAKPEDRNDPMLLYNKMTLAQIQNNFSLEINGKPF SWLNFTNEIMSTVNI SITNEEDVVVYAPE
 YLTKLKPILTKYSARDLQNLMSWRFIMDLVSSLRRTYKESRNAFRKALYGTTSSETATWRRCANVYVNGME
 NAVGRLYVEAAFAGESKHVVEDLIAQIREVFIQTLDDL TWMDAETKKRAEEKALAIKERIGYPDDIVSND
 NKLNNEYLELNYKEDEYFENIIQNLKFSQSKQLKLRKVDKDEWISGAAYVNAFYSSGRNQIVFPAGIL
 QPPFFSAQQSNSLNYGGIGMVGHEITHGFDDNGRNFNKDGLVDWWTQQSASFKEQSQCMVYQYGNFS
 WDLAGGQHLNGINTLGENIADNGGLQAYRAYQNYIKKNGEEKLLPGLDLNHKQLFFLNFAQVWCCTYRP
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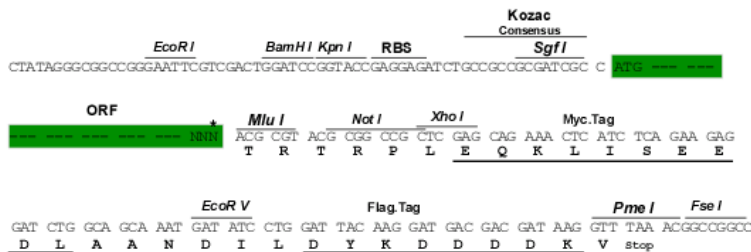
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6107_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000902

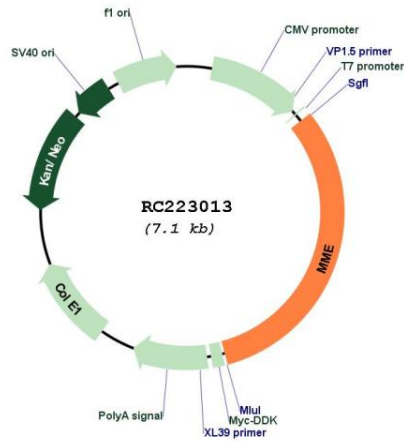
ORF Size: 2250 bp

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](#)

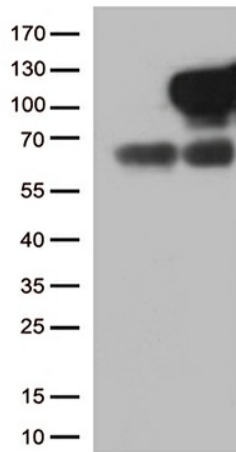
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_000902.4
RefSeq Size:	5595 bp
RefSeq ORF:	2253 bp
Locus ID:	4311
UniProt ID:	P08473
Cytogenetics:	3q25.2
Domains:	Peptidase_M13
Protein Families:	Druggable Genome, Protease, Transmembrane
Protein Pathways:	Alzheimer's disease, Hematopoietic cell lineage, Renin-angiotensin system
MW:	85.3 kDa
Gene Summary:	The protein encoded by this gene is a type II transmembrane glycoprotein and a common acute lymphocytic leukemia antigen that is an important cell surface marker in the diagnosis of human acute lymphocytic leukemia (ALL). The encoded protein is present on leukemic cells of pre-B phenotype, which represent 85% of cases of ALL. This protein is not restricted to leukemic cells, however, and is found on a variety of normal tissues. The protein is a neutral endopeptidase that cleaves peptides at the amino side of hydrophobic residues and inactivates several peptide hormones including glucagon, enkephalins, substance P, neurotensin, oxytocin, and bradykinin. [provided by RefSeq, Aug 2017]

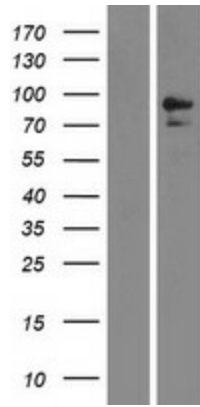
Product images:



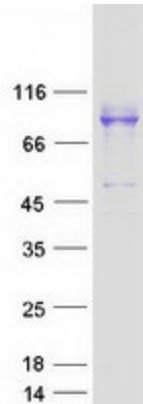
Circular map for RC223013



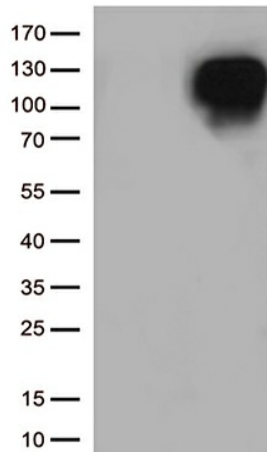
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MME (Cat# RC223013, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MME (Cat# [TA504507])(1:500).



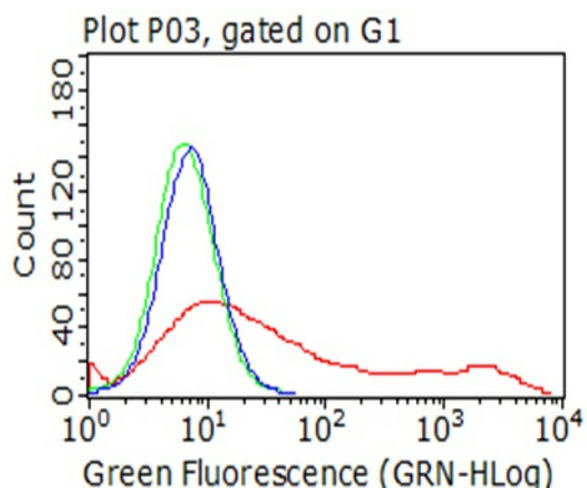
Western blot validation of overexpression lysate (Cat# [LY416066]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC223116] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MME protein (Cat# [TP323013]). The protein was produced from HEK293T cells transfected with MME cDNA clone (Cat# RC223013) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MME (RC223013, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MME (1:500).



Flow cytometric analysis of living 293T cells transfected with MME overexpression plasmid (RC223013, Red)/empty vector ([PS100001], Blue) using anti-MME antibody ([UM800128]). Cells incubated with a non-specific antibody (Green) were used as isotype control (1:100).