

Product datasheet for RC210143

OriGene Technologies, Inc.

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Mannan Binding Lectin (MBL2) (NM_000242) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Mannan Binding Lectin (MBL2) (NM_000242) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Mannan Binding Lectin

Synonyms: COLEC1; HSMBPC; MBL; MBL2D; MBP; MBP-C; MBP1; MBPD

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC210143 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC210143 protein sequence

Red=Cloning site Green=Tags(s)

MSLFPSLPLLLLSMVAASYSETVTCEDAQKTCPAVIACSSPGINGFPGKDGRDGTKGEKGEPGQGLRGLQ GPPGKLGPPGNPGPSGSPGPKGQKGDPGKSPDGDSSLAASERKALQTEMARIKKWLTFSLGKQVGNKFFL TNGEIMTFEKVKALCVKFQASVATPRNAAENGAIQNLIKEEAFLGITDEKTEGQFVDLTGNRLTYTNWNE GEPNNAGSDEDCVLLLKNGQWNDVPCSTSHLAVCEFPI

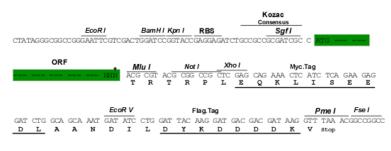
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6267 h08.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000242

ORF Size: 744 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.

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

0.22um filter is required.

RefSeq: <u>NM 000242.3</u>

RefSeq Size: 3569 bp

 RefSeq ORF:
 747 bp

 Locus ID:
 4153

 UniProt ID:
 P11226

 Cytogenetics:
 10q21.1

Protein Families: Druggable Genome

Protein Pathways: Complement and coagulation cascades

MW: 26.1 kDa

Gene Summary: This gene encodes the soluble mannose-binding lectin or mannose-binding protein found in

serum. The protein encoded belongs to the collectin family and is an important element in

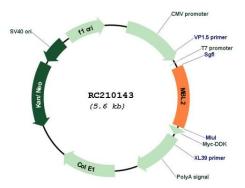
the innate immune system. The protein recognizes and binds to mannose and N-

acetylglucosamine on many microorganisms, including bacteria, yeast, and viruses including influenza virus, HIV and SARS-CoV. This binding activates the classical complement pathway. Deficiencies of this gene have been associated with susceptibility to autoimmune and

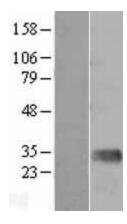
infectious diseases. [provided by RefSeq, Jun 2020]



Product images:

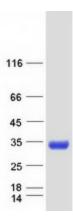


Circular map for RC210143



Western blot validation of overexpression lysate (Cat# [LY424849]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210143 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified MBL2 protein (Cat# [TP310143]). The protein was produced from HEK293T cells transfected with MBL2 cDNA clone (Cat# RC210143) using MegaTran 2.0 (Cat# [TT210002]).