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Product datasheet for RC205320

Monoamine Oxidase B (MAOB) (NM_000898) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Monoamine Oxidase B (MAOB) (NM_000898) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Monoamine Oxidase B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205320 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCAACAAATGCGACGTGGTCGTGGTGGGGGGCGGCATCTCAGGTATGGCAGCAGCCAAACTTCTGC
ATGACTCTGGACTGAATGTGGTTGTTCTGGAAGCCCGGGACCATGTGGGAGGCAGGACTTACACTCTTAG
GAACCAAAAGGTTAAATATGTGGACCTTGGAGGATCCTATGTTGGACCAACCCAGAATCGTATCTTGAGA
TTAGCCAAGGAGCTAGGATTGGAGACCTACAAAGTGAATGAGGTTGAGCGTCTGATCCACCATGTAAAGG
GCAAATCATACCCCTTCAGGGGGCCATTCCCACCTGTATGGAATCCAATTACCTACTTAGATCATAACAA
CTTTTGGAGGACAATGGATGACATGGGGCGAGAGATTCAGAGTGATGCCCCATGGAAGGCTCCCCTTGCA
GAAGAGTGGGACAACATGACAATGAAGGAGCTACTGGACAAGCTCTGCTGGACTGAATCTGCAAAGCAGC
TTGCCACTCTCTTTGTGAACCTGTGTGTCACTGCAGAGACCCATGAGGTCTCTGCTCTCTGGTTCCTGTG
GTATGTGAAGCAGTGTGGAGGCACAACAAGAATCATCTCGACAACAAATGGAGGACAGGAGAGGAAATTT
GTGGGCGGATCTGGTCAAGTGAGTGAGCGGATAATGGACCTCCTTGGAGACCGAGTGAAGCTGGAGAGGC
CTGTGATCTACATTGACCAGACAAGAGAAAATGTCCTTGTGGAGACCCTAAACCATGAGATGTATGAGGC
TAAATATGTGATTAGTGCTATTCCTCCTACTCTGGGCATGAAGATTCACTTCAATCCCCCTCTGCCAATG
ATGAGAAACCAGATGATCACTCGTGTGCCTTTGGGTTCAGTCATCAAGTGTATAGTTTATTATAAAGAGC
CTTTCTGGAGGAAAAAGGATTACTGTGGAACCATGATTATTGATGGAGAAGAAGCTCCAGTTGCCTACAC
GTTGGATGATACCAAACCTGAAGGCAACTATGCTGCCATAATGGGATTTATCCTGGCCCACAAAGCCAGA
AAACTGGCACGTCTTACCAAAGAGGAAAGGTTGAAGAAACTTTGTGAACTCTATGCCAAGGTTCTGGGTT
CCCTAGAAGCTCTGGAGCCAGTGCATTATGAAGAAAAGAACTGGTGTGAGGAGCAGTACTCTGGGGGCTG
CTACACAACTTATTTCCCCCCTGGGATCCTGACTCAATATGGAAGGGTTCTACGCCAGCCAGTGGACAGG
ATTTACTTTGCAGGCACCGAGACTGCCACACACTGGAGCGGCTACATGGAGGGGGCTGTAGAGGCCGGGG
AGAGAGCAGCCCGAGAGATCCTGCATGCCATGGGGAAGATTCCAGAGGATGAAATCTGGCAGTCAGAACC
AGAGTCTGTGGATGTCCCTGCACAGCCCATCACCACCACCTTTTTGGAGAGACATTTGCCCTCCGTGCCA
GGCCTGCTCAGGCTGATTGGATTGACCACCATCTTTTCAGCAACGGCTCTTGGCTTCCTGGCCCACAAAA
GGGGGCTACTTGTGAGAGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205320 protein sequence
Red=Cloning site Green=Tags(s)

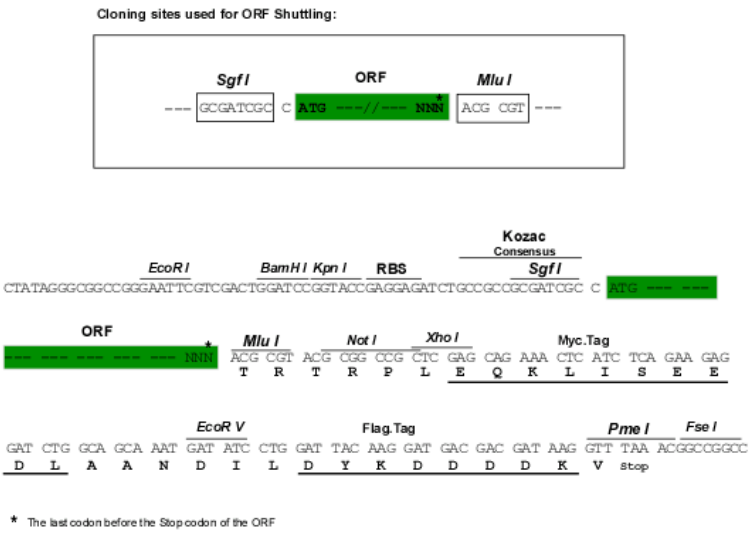
MSNKCDVVVVGGGISGMAAAKLLHDSGLNVVVLEARDHVGGRTYTLRNQKVKYVDLGGSYVGPTQNRILR
LAKELGLETYKVNEVERLIHHVKGKSYPFRGPFPPVWNPITYLDHNNFWRTMDDMGREIQSDAPWKAPLA
EEWDNMTMKELLDKLCWTESAKQLATLFVNLCVTAETHEVSALWFLWYVKQCGGTTRIISTTNGGQERKF
VGGSGQVSERIMDLLGDRVKLERPVIYIDQTRENVLVETLNHEMYEAKYVISAIPPTLGMKIHFNPPLPM
MRNQMITRVPLGSVIKCIVYYKEPFWRKKDYCGTMIIDGEEAPVAYTLDDTKPEGNYAAIMGFILAHKAR
KLARLTKEERLKKLCELYAKVLGSLEALEPVHYEEKNWCEEQYSGGCYTTYFPPGILTQYGRVLRQPVDR
IYFAGTETATHWSGYMEGAVEAGERAAREILHAMGKIPEDEIWQSEPESVDVPAQPITTTFLERHLPSVP
GLLRLIGLTTIFSATALGFLAHKRGLLVRV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6196_a03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000898

ORF Size: 1560 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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

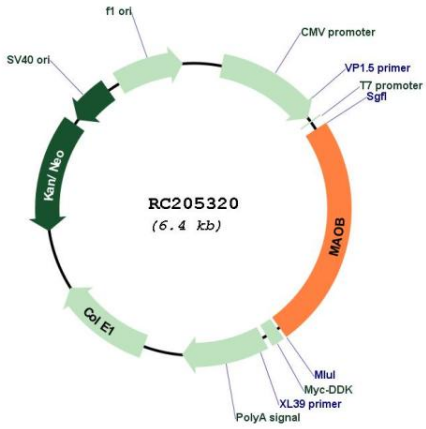
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

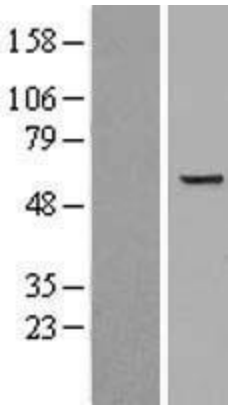
Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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_000898.2
RefSeq Size:	2611 bp
RefSeq ORF:	1563 bp
Locus ID:	4129
UniProt ID:	P27338
Cytogenetics:	Xp11.3
Domains:	Amino_oxidase
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Arginine and proline metabolism, Drug metabolism - cytochrome P450, Glycine, serine and threonine metabolism, Histidine metabolism, Metabolic pathways, Phenylalanine metabolism, Tryptophan metabolism, Tyrosine metabolism
MW:	58.8 kDa
Gene Summary:	The protein encoded by this gene belongs to the flavin monoamine oxidase family. It is a enzyme located in the mitochondrial outer membrane. It catalyzes the oxidative deamination of biogenic and xenobiotic amines and plays an important role in the metabolism of neuroactive and vasoactive amines in the central nervous sysytem and peripheral tissues. This protein preferentially degrades benzylamine and phenylethylamine. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC205320



Western blot validation of overexpression lysate (Cat# [LY400321]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205320 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).