

Product datasheet for SC332947

OriGene Technologies, Inc.

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Monoamine Oxidase A (MAOA) (NM_001270458) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Monoamine Oxidase A (MAOA) (NM_001270458) Human Untagged Clone

Tag: Tag Free

Symbol: Monoamine Oxidase A

Synonyms: BRNRS; MAO-A

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC332947 representing NM_001270458.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGGGAAGGAGATTCCAACTGATGCACCCTGGGAGGCTCAACATGCTGACAAATGGGACAAAATGACC ATGAAAGAGCTCATTGACAAAATCTGCTGGACAAAGACTGCTAGGCGGTTTGCTTATCTTTTTGTGAAT ATCAATGTGACCTCTGAGCCTCACGAAGTGTCTGCCCTGTGGTTCTTGTGGTATGTGAAGCAGTGCGGG GGCACCACTCGGATATTCTCTGTCACCAATGGTGGCCAGGAACGGAAGTTTGTAGGTGGATCTGGTCAA GCGATCCCTCCGACCTTGACTGCCAAGATTCACTTCAGACCAGAGCTTCCAGCAGAGAGAAACCAGTTA ATTCAGCGGCTTCCAATGGGAGCTGTCATTAAGTGCATGATGTATTACAAGGAGGCCTTCTGGAAGAAG AAGGATTACTGTGGCTGCATGATCATTGAAGATGAAGATGCTCCAATTTCAATAACCTTGGATGACACC AAGCCAGATGGGTCACTGCCTGCCATCATGGGCTTCATTCTTGCCCGGAAAGCTGATCGACTTGCTAAG CTACATAAGGAAATAAGGAAGAAGAAAATCTGTGAGCTCTATGCCAAAGTGCTGGGATCCCAAGAAGCT TTACATCCAGTGCATTATGAAGAGAAGAACTGGTGTGAGGAGCAGTACTCTGGGGGGCTGCTACACGGCC TACTTCCCTCCTGGGATCATGACTCAATATGGAAGGGTGATTCGTCAACCCGTGGGCAGGATTTTCTTT GCGGGCACAGAGACTGCCACAAAGTGGAGCGGCTACATGGAAGGGGCAGTTGAGGCTGGAGAACGAGCA GCTAGGGAGGTCTTAAATGGTCTCGGGAAGGTGACCGAGAAAGATATCTGGGTACAAGAACCTGAATCA AAGGACGTTCCAGCGGTAGAAATCACCCACACCTTCTGGGAAAGGAACCTGCCCTCTGTTTCTGGCCTG CTGAAGATCATTGGATTTTCCACATCAGTAACTGCCCTGGGGTTTGTGCTGTACAAATACAAGCTCCTG

CCACGGTCTTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001270458

Insert Size: 1185 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).





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 001270458.1

RefSeq Size: 5438 bp
RefSeq ORF: 1185 bp
Locus ID: 4128
UniProt ID: P21397
Cytogenetics: Xp11.3

Protein Families: Druggable Genome

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: 44.8 kDa

Gene Summary: This gene is one of two neighboring gene family members that encode mitochondrial

enzymes which catalyze the oxidative deamination of amines, such as dopamine,

norepinephrine, and serotonin. Mutation of this gene results in Brunner syndrome. This gene has also been associated with a variety of other psychiatric disorders, including antisocial behavior. Alternatively spliced transcript variants encoding multiple isoforms have been

observed. [provided by RefSeq, Jul 2012]

Transcript Variant: This variant (2) contains an alternate exon in the 5' UTR and uses a downstream, in-frame start codon compared to variant 1. It encodes isoform 2 which has a shorter N-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were

based on transcript alignments.