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# Product datasheet for SC330211

## Arginase 1 (ARG1) (NM_001244438) Human Untagged Clone

### Product data:

**Product Type:** Expression Plasmids

**Product Name:** Arginase 1 (ARG1) (NM_001244438) Human Untagged Clone

**Tag:** Tag Free

**Symbol:** ARG1

**Vector:** pCMV6-Entry (PS100001)

**Fully Sequenced ORF:**

>SC330211 representing NM_001244438.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGAGCGCCAAGTCCAGAACCATAGGGATTATTGGAGCTCCTTTCTCAAAGGGACAGCCACGAGGAGGG
GTGGAAGAAGGCCCTACAGTATTGAGAAAGGCTGGTCTGCTTGAGAAACTTAAAGAACAAGTAACTCAA
AACTTTTTAATTTTAGAGTGTGATGTGAAGGATTATGGGGACCTGCCCTTTGCTGACATCCCTAATGAC
AGTCCCTTTCAAATTGTGAAGAATCCAAGGTCTGTGGGAAAAGCAAGCGAGCAGCTGGCTGGCAAGGTG
GCAGAAGTCAAGAAGAACGGAAGAATCAGCCTGGTGCTGGGCGGAGACCACAGTTTGGCAATTGGAAGC
ATCTCTGGCCATGCCAGGGTCCACCCTGATCTTGGAGTCATCTGGGTGGATGCTCACACTGATATCAAC
ACTCCACTGACAACCACAAGTGGAAACTTGCATGGACAACCTGTATCTTTCCTCCTGAAGGAACTAAAA
GGAAAGATTCCCGATGTGCCAGGATTCTCCTGGGTGACTCCCTGTATATCTGCCAAGGATATTGTGTAT
ATTGGCTTGAGAGACGTGGACCCTGGGGAACACTACATTTTGAAAACTCTAGGCATTAAATACTTTTCA
ATGACTGAAGTGGACAGACTAGGAATTGGCAAGGTGATGGAAGAAACACTCAGCTATCTACTAGGAAGA
AAGAAAAGGCCAATTCATCTAAGTTTTGATGTTGACGGACTGGACCCATCTTTCACACCAGCTACTGGC
ACACCAGTCGTGGGAGGTCTGACATACAGAGAAGGTCTCTACATCACAGAAGAAATCTACAAAACAGGG
CTACTCTCAGGATTAGATATAATGGAAGTGAACCCATCCCTGGGGAAGACACCAGAAGAAGTAACTCGA
ACAGTGAACACAGCAGTTGCAATAACCTTGGCTTGTTTCGGACTTGCTCGGGAGGGTAATCACAAGCCT
ATTGACTACCTTAACCCACCTAAGTAA

**Restriction Sites:** SgfI-MluI



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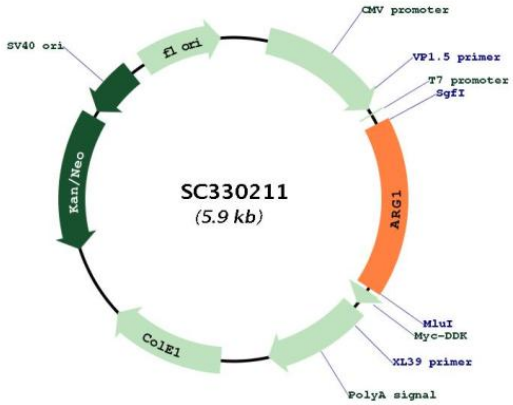
Plasmid Map:




| | |
|---|---|
| **ACCN:** | NM_001244438 |
| **Insert Size:** | 993 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.<br><br>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 |
| **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). |

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| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001244438.1 |
| **RefSeq Size:** | 1499 bp |
| **RefSeq ORF:** | 993 bp |
| **Locus ID:** | 383 |
| **UniProt ID:** | P05089 |
| **Cytogenetics:** | 6q23.2 |
| **Protein Families:** | Druggable Genome |
| **Protein Pathways:** | Arginine and proline metabolism, Metabolic pathways |
| **MW:** | 35.7 kDa |
| **Gene Summary:** | Arginase catalyzes the hydrolysis of arginine to ornithine and urea. At least two isoforms of mammalian arginase exist (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic function. The type I isoform encoded by this gene, is a cytosolic enzyme and expressed predominantly in the liver as a component of the urea cycle. Inherited deficiency of this enzyme results in argininemia, an autosomal recessive disorder characterized by hyperammonemia. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]<br>Transcript Variant: This variant (1, also known as erythroid variant) represents the longer transcript and encodes the longer isoform (1). |