

Product datasheet for **SC324527**

Arginase 1 (ARG1) (NM_000045) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arginase 1 (ARG1) (NM_000045) Human Untagged Clone
Tag:	Tag Free
Symbol:	Arginase 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>>OriGene sequence for NM_000045.2</p> <pre>AGAGCATGAGCGCAAGTCCAGAACCATAGGGATTATTGGAGCTCCTTTCTCAAAGGGAC AGCCACGAGGAGGGTGAAGAAGGCCCTACAGTATTGAGAAAGGCTGGTCTGCTTGAGA AACTTAAAGAACAAGAGTGTGATGTGAAGGATTATGGGGACCTGCCTTTGCTGACATCC CTAATGACAGTCCCTTTCAAATTGTGAAGAATCCAAGGTCTGTGGGAAAAGCAAGCGAGC AGCTGGCTGGCAAGTGGCAGAAGTCAAGAAGAACGGAAGAATCAGCCTGGTGTGGGCG GAGACCACAGTTTGGCAATTGGAAGCATCTCTGGCCATGCCAGGGTCCACCCTGATCTTG GAGTCATCTGGGTGGATGCTCACACTGATATCAACTCCACTGACAACCACAAGTGAA ACTTGCATGGACAACCTGTATCTTTCTCCTGAAGGAACAAAAGGAAAGATTCCCGATG TGCCAGGATTCTCCTGGGTGACTCCCTGTATATCTGCCAAGGATATTGTGTATATTGGCT TGAGAGACGTGGACCCTGGGGAACACTACATTTTGAAAACCTAGGCATTAATACTTTT CAATGACTGAAGTGGACAGACTAGGAATTGGCAAGGTGATGGAAGAAACACTCAGCTATC TACTAGGAAGAAAAGAAAAGGCCAATTCATCTAAGTTTTGATGTTGACGGACTGGACCCAT CTTTCACACCAGCTACTGGCACACCAGTCGTGGGAGGTCTGACATACAGAGAAGGTCTCT ACATCACAGAAGAAATCTACAAAACAGGGCTACTCTCAGGATTAGATATAATGGAAGTGA ACCCATCCCTGGGGAAGACACCAGAAGAAGTAACTCGAACAGTGAACACAGCAGTTGCAA TAACCTTGGCTTGTTCGGACTTGCTCGGGAGGGTAATCACAAGCCTATTGACTACCTTA ACCCACCTAAGTAAATGTGGAACATCCGATATAAATCTCATAGTTAATGGCATAATTAG AAAGCTAATCATTTTCTAAGCATAGAGTTATCCTTCTAAAGACTTGTTCTTTCAGAAAA ATGTTTTTCCAATTAGTATAAACTCTACAAATCCCTCTTGGTGTAAAATTCAAGATGTG GAAATTCTAACTTTTTTGAATTTAAAAGCTTATATTTTCTAACTTGGCAAAAAGACTTAT CCTTAGAAAAGAGAAGTGTACATTGATTTCCAATTAATAAATTTGCTGGCATTAAAAATAAG CACACTTACATAAGCCCCATACATAGAGTGGGACTCTTGGAAATCAGGAGACAAAAGCTAC CACATGTGGAAGGTAATGTGTCCATGTCAATTAATAAATGTGATTTTTATAATAAAA CTCTTTATAACAAGACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA</pre>
Restriction Sites:	Please inquire
ACCN:	NM_000045



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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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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.
RefSeq:	<u>NM_000045.2</u> , <u>NP_000036.2</u>
RefSeq Size:	1447 bp
RefSeq ORF:	969 bp
Locus ID:	383
UniProt ID:	<u>P05089</u>
Cytogenetics:	6q23.2
Domains:	arginase
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice site at the 5' end of an exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.</p>