Active Recombinant Full Length Human ARG1 Protein, C-Flag-tagged

Cat. No. ARG1-250HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human ARG1 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	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.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	Arginase activity verified in a biochemical assay: Arginase 1 activity was measured in a colorimetric biochemical assay. Arginase 1 catalyzes the conversion of arginine to ornithine and urea. After incubation of the protein in a solution containing L-arginine, the reaction is stopped, and the urea concentration is measured by a chemical reaction that produces a colored product that absorbs at 430 nm. By measuring the

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	absorbance at 430 nm and comparing to a standard, the specific activity of this preparation of ARG1 was calculated to be approximately 10U/mg. Unit definition: 1 unit of ARG1 converts 1μmole of L-arginine to ornithine and urea per minute at pH 9.5 and 37 centigrade.
Molecular Mass	34.6 kDa
AA Sequence	MSAKSRTIGIIGAPFSKGQPRGGVEEGPTVLRKAGLLEKLKEQECDVKDYGDLPFAD IPNDSPFQIVKNP RSVGKASEQLAGKVAEVKKNGRISLVLGGDHSLAIGSISGHARV HPDLGVIWVDAHTDINTPLTTTSGNL HGQPVSFLLKELKGKIPDVPGFSWVTPCISA KDIVYIGLRDVDPGEHYILKTLGIKYFSMTEVDRLGIGK VMEETLSYLLGRKKRPIHLS FDVDGLDPSFTPATGTPVVGGLTYREGLYITEEIYKTGLLSGLDIMEVNP SLGKTPEEVTRTVNTAVAITLACFGLAREGNHKPIDYLNPPKTRTRPLEQKLISEEDLA ANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome
Protein Pathways	Arginine and proline metabolism, Metabolic pathways

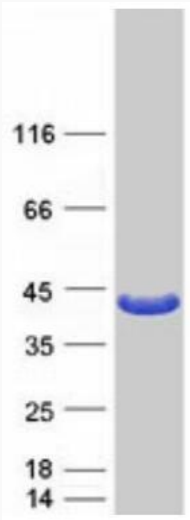
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Full Length	Full L.

GENE INFORMATION

Gene Name	ARG1 arginase 1 [Homo sapiens (human)]
Official Symbol	ARG1
Synonyms	arginase, liver; arginase 1; liver-type arginase; OTTHUMP00000017209; type I arginase
Gene ID	383
mRNA Refseq	NM_000045.4
Protein Refseq	NP_000036.2
MIM	608313
UniProt ID	P05089

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA



Coomassie blue staining of purified ARG1 protein.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA