Active Recombinant Full Length Human ARG2 Protein, C-Flag-tagged

Cat. No. ARG2-148HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human ARG2 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 exists (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic function. The type II isoform encoded by this gene, is located in the mitochondria and expressed in extra-hepatic tissues, especially kidney. The physiologic role of this isoform is poorly understood; it is thought to play a role in nitric oxide and polyamine metabolism. Transcript variants of the type II gene resulting from the use of alternative polyadenylation sites have been described.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	L-Arginase activity verified in a biochemical assay: Arginase 2 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 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

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	absorbance at 430 nm and comparing to a standard, the specific activity of this preparation of ARG2 was calculated to be approximately 10U/mg. Unit definition: 1 unit of ARG2 converts 1 μmole of L-arginine to ornithine and urea per minute at pH 9.5 and 37 centigrade.
Molecular Mass	36 kDa
AA Sequence	MSLRGSLSRLLQTRVHSILKKSVHSVAVIGAPFSQGQKRKGVEHGPAAIREAGLMKR LSSLGCHLKDFGD LSFTPVPKDDLYNNLIVNPRSVGLANQELAEVVSRAVSDGYSC VTLGGDHSLAIGTISGHARHCPDLCVV WVDAHADINTPLTTSSGNLHGQPVSFLLRE LQDKVPQLPGFSWIKPCISSASIVYIGLRDVDPPEHFILK NYDIQYFSMRDIDRLGIQK VMERTFDLLIGKRQRPIHLSFDIDAFDPTLAPATGTPVVGGLTYREGMYIA EEIHNTG LLSALDLVEVNPQLATSEEEAKTTANLAVDVIASSFGQTREGGHIVYDQLPTPSSPDE SENQA RVRITRTRPLEQKLISEEDLAANDILDYKDDDDKV
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 Pathways	Arginine and proline metabolism, Metabolic pathways

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Full Length	Full L.

GENE INFORMATION

Gene Name	ARG2 arginase 2 [Homo sapiens (human)]
Official Symbol	ARG2
Synonyms	arginase 2; kidney arginase; L-arginine amidinohydrolase; L-arginine ureahydrolase; nonhepatic arginase
Gene ID	384
mRNA Refseq	NM_001172.4
Protein Refseq	NP_001163.1
MIM	107830
UniProt ID	P78540

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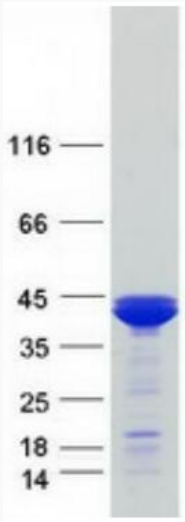

Coomassie blue staining of purified ARG2 protein.

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