

Product datasheet for TP306756

ARG2 (NM_001172) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human arginase, type II (ARG2), nuclear gene encoding mitochondrial protein, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC206756 protein sequence Red=Cloning site Green=Tags(s)

MSLRGSLSRLLQTRVHSILKKS VHSVAVIGAPFSQGQKRKGVEHGPA AIREAGLMKRLSSLGCHLKDFGD
LSFTVPKDDLYNNLIVNPRSVGLANQELAEVVSRAVSDGYSCVTLGGDHSLAIGTISGHARHCPDLCVW
WVDAHADINTPLTSSGNLHGQPVSFLLRELQDKVPQLPGFSWIKPCISSASIVYIGLRDVPPEHFILK
NYDIQYFSMRDIDRLGIQKVMERTFDLLIGKRQRPIHLSFDIDAFDPTLAPATGTPVVGGLTYREGMYIA
EEIHNTGLLSALDLVEVNPQLATSEEEAKTTANLAVDVIASSFGQTREGGHIVYDQLPTPSSPDESENQA
RVRI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

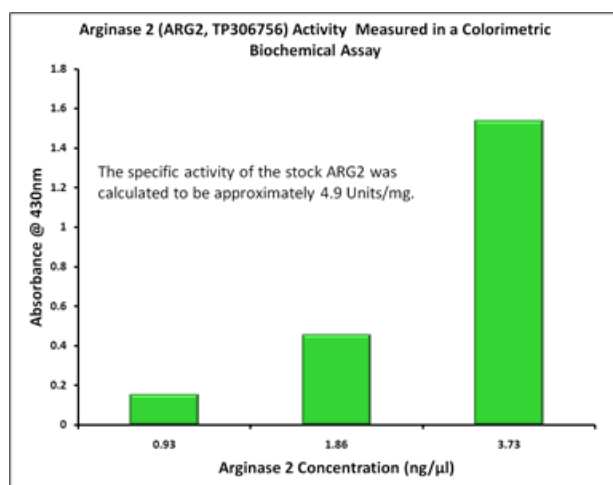
Tag:	C-Myc/DDK
Predicted MW:	36 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	L-Arginase activity verified in a biochemical assay : Arginase 2 (ARG2, TP306756) 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 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°C.

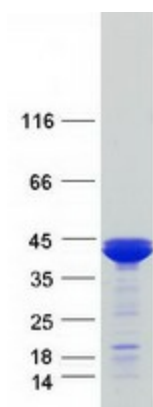


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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_001163</u>
Locus ID:	384
UniProt ID:	<u>P78540</u>
RefSeq Size:	1981
Cytogenetics:	14q24.1
RefSeq ORF:	1062
Summary:	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. [provided by RefSeq, Jul 2008]
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways

Product images:





Coomassie blue staining of purified ARG2 protein (Cat# TP306756). The protein was produced from HEK293T cells transfected with ARG2 cDNA clone (Cat# [RC206756]) using MegaTran 2.0 (Cat# [TT210002]).