

Arginase (ARG) Active Protein | ARG active protein

Active Arginase (ARG)

CATALOG # AAA148185	HOST E Coli	REACTIVITY Human	APPLICATIONS Activity Assay, Cell Culture
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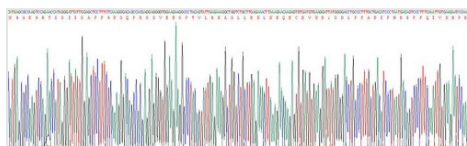
PRODUCT SYNONYMS

Arginase (ARG); Active Arginase (ARG); ARG1; Arginase I; Liver Arginase; ARG active protein

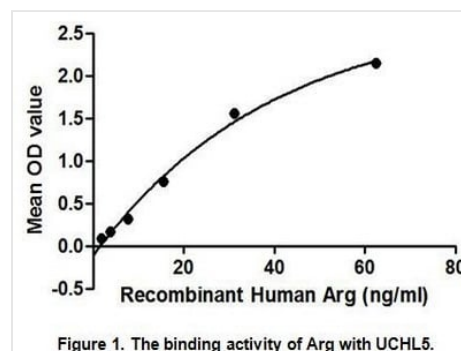
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	322
Applicable Applications for ARG active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Met1-Lys322
Isoelectric Point	6.7

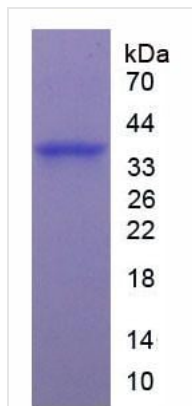
IMAGES



Application Data



Application Data



SDS-PAGE

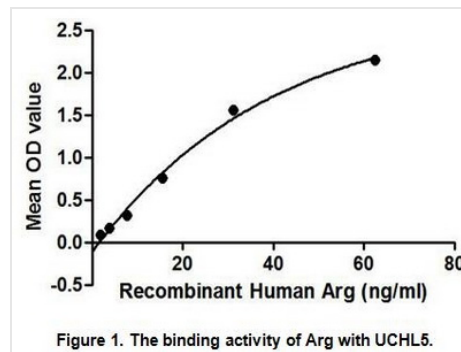


Figure 1. The binding activity of Arg with UCHL5.

Activity

Arginase (Arg) is an enzyme that catalyzes the degradation of arginine to produce urea and ornithine, which is crucial in the urea cycle. In most mammals, two isozymes of this enzyme exist; the first, Arginase I, functions in the urea cycle, and is located primarily in the cytoplasm of the liver. The second isozyme, Arginase II, has been implicated in the regulation of the arginine/ornithine concentrations in the cell. Besides, Ubiquitin Carboxyl Terminal Hydrolase L5 (UCHL5) has been identified as an interactor of Arg, thus a binding ELISA assay was conducted to detect the interaction of recombinant human Arg and recombinant human UCHL5. Briefly, Arg were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to UCHL5-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-Arg pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of Arg and UCHL5 was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for ARG active protein	Enzyme & Kinase; Tumor immunity; Infection immunity; Hepatology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10947139
NCBI GeneID	383
NCBI Accession #	NP_000036.2
NCBI GenBank Nucleotide #	NM_000045.3
UniProt Accession #	P05089; Q5JWT5; Q5JWT6; Q8TE72; Q9BS50; A6NEA0
Molecular Weight	Predicted Molecular Weight: 36.9kDa Accurate Molecular Weight: 37kDa
NCBI Official Full Name	arginase-1 isoform 2
NCBI Official Synonym Full Names	arginase 1
NCBI Official Symbol	ARG1
NCBI Protein Information	arginase-1
UniProt Protein Name	Arginase-1
UniProt Gene Name	ARG1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.