

Rat Arginase 1 protein, His tag

Cat. No. GTX00359-pro

Applications	Functional Assay	Package 10 μg
Species	Rat	13

Applications

Application Note

Arginase (Arg) is an enzyme that catalyzes the degradation of arginine to produce urea and omithine, 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, Estrogen Receptor Alpha (ERa) has been identified as an interactor of, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat Arginase (Arg) and recombinant rat ERa. Briefly, Arg were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to ERa-coated microtiter wells and incubated for 2h at 37°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°C. Finally, add 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of of Arg and ERa was in a dose dependent manner.

Observed MW (kDa) 37 kDa.

Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	Full length protein, N-terminal His-Tag; Met1~Lys323 (NP_058830.2)	
Expression System	E. coli	
Purity	> 97%	
Endotoxin	< 1 EU/μg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



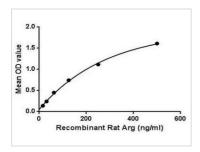
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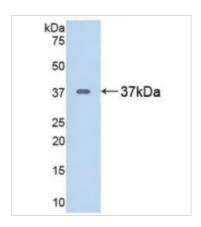


DATA IMAGES



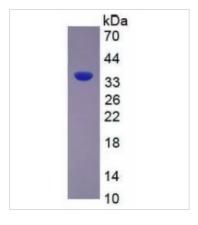
GTX00359-pro Functional Assay Image

Functional ELISA analysis of GTX00359-pro Rat Arginase 1 protein which can bind immobilized ER alpha protein.



GTX00359-pro Image

WB analysis of GTX00359-pro Rat Arginase 1 protein.



GTX00359-pro Image

SDS-PAGE analysis of GTX00359-pro Rat Arginase 1 protein.



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