Technical Data Sheet

Purified Mouse Anti-Arginase I

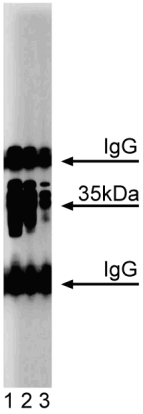
Product Information

Material Number:	**610708**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	19/Arginase I
Immunogen:	Human Arginase I aa. 53-207
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Rat, Drosophilia
Target MW:	35 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

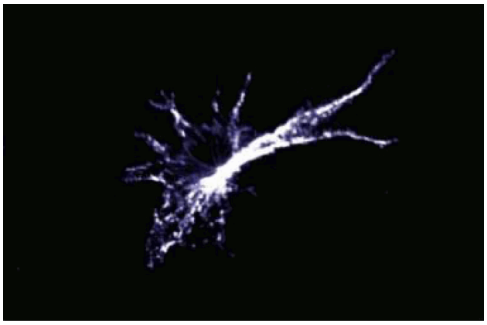
Description

Arginase converts arginine into urea plus ornithine, the final step in urea synthesis. Two different isoforms (I&II) have been isolated with approximately 60% homology at the nucleotide level. While type II is present in many tissues, Arginase I is expressed exclusively in liver. In cultured macrophages, as well as in vivo, Arginase I is induced with nitric oxide synthase (NOS) and the arginase I transactivator C/EBPβ in response to lipopolysaccharide. This response occurs in a dose and time-dependent manner. While the mRNA for NOS appears as early as 2h after treatment, mRNA levels for arginase I peak after twelve hours of lipopolysaccharide treatment. Since the synthesis of nitric oxide by NOS requires arginine, the delayed induction of arginase I may be necessary for the regulation of NOS activity.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Arginase I on a mouse liver lysate. *Lane 1: 1:1000, lane 2: 1: 2000, lane 3: 1:4000 dilution of the mouse anti-arginase 1 antibody.*



Immunofluorescence staining of mouse macrophages.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611458	Mouse Liver Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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Haraguchi Y, Takiguchi M, Amaya Y, Kawamoto S, Matsuda I, Mori M. Molecular cloning and nucleotide sequence of cDNA for human liver arginase. *Proc Natl Acad Sci U S A.* 1987; 84(2):412-415.(Biology)

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