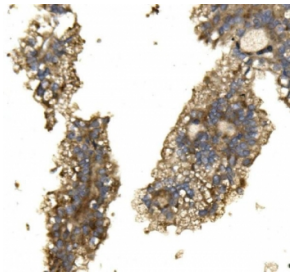
Arginase 2 Antibody / ARG2 (RQ5703)

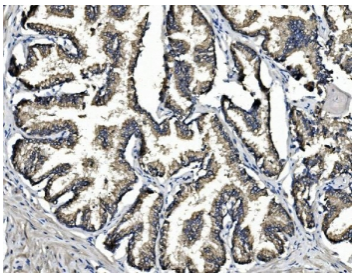
Catalog No.	Formulation	Size
RQ5703	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

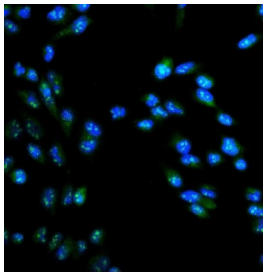
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P78540
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Arginase 2 antibody is available for research use only.



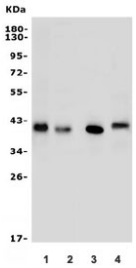
IHC staining of FFPE human renal cancer with Arginase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



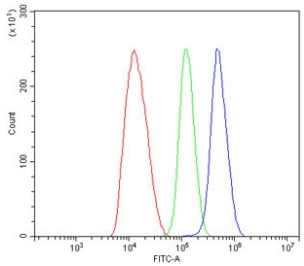
IHC staining of FFPE human prostate cancer with Arginase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human HeLa cells with Arginase 2 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HEK293, 2) human SW620, 3) rat kidney and 4) mouse kidney lysate with Arginase 2 antibody. Predicted molecular weight ~38 kDa.



Flow cytometry testing of human HepG2 cells with Arginase 2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ARG2 antibody.

Description

ARG2 (arginase, type II) encodes a 355-amino acid polypeptide. Using Northern blotting and RT-PCR, Vockley et al.(1996) found that ARG 2is expressed as a 1.5-kb mRNA in a wide variety of tissues, with highest levels of expression in prostate, brain, and kidney. By PCR analysis of somatic cell hybrid panels, fluorescence in situ hybridization, and radiation hybrid analysis, the ARG2 gene is mapped to 14q24.1-q24.3. ARG2 may be inducible and may be essential in the regulation of nitric oxide synthesis by modulating local arginine concentrations. Gotoh et al.(1996)showed that ARG2 mRNA and nitric oxide synthase (NOS) mRNA were coinduced by lipopolysaccharide in a macrophage-like cell line. Arginase II has been implicated in the regulation of the arginine/ornithine concentrations in the cell. The mitochondrial location of ARG2 and its coinduction with ornithine aminotransferase and involvement with proline biosynthesis in lactating rat mammary gland had led to the inference that ARG2 is involved in biosynthetic functions, as opposed to the metabolic ones of the urea cycle.

Application Notes

Optimal dilution of the Arginase 2 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids M1-I354) was used as the immunogen for the Arginase 2 antibody.

Storage

After reconstitution, the Arginase 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.