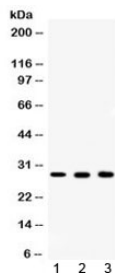


CA2 Antibody / Carbonic Anhydrase 2 (R32474)

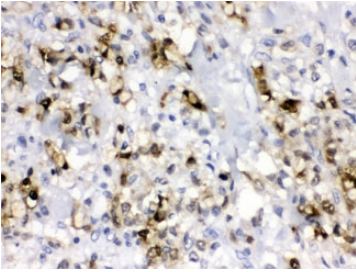
Catalog No.	Formulation	Size
R32474	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

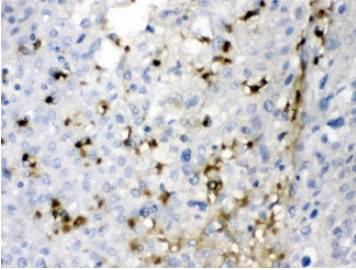
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P00918
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml Flow Cytometry : 1-3ug/10 ⁶ cells
Limitations	This CA2 antibody is available for research use only.



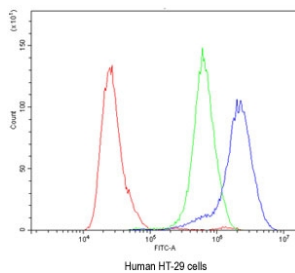
Western blot testing of 1) rat ovary, 2) mouse liver and 3) human MCF7 lysate with CA2 antibody at 0.5ug/m. Predicted/observed molecular weight ~29 kDa.



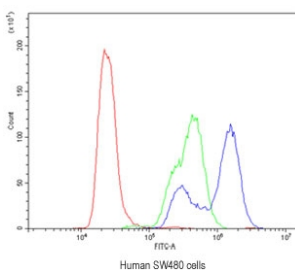
IHC testing of FFPE human gastric cancer tissue with CA2 antibody at 1 ug/ml. HIER: steam in pH6 citrate buffer and allow to cool prior to staining.



IHC testing of FFPE human liver cancer tissue with CA2 antibody at 1 ug/ml. HIER: steam in pH6 citrate buffer and allow to cool prior to staining.



Flow cytometry testing of human HT-29 cells with CA2 antibody at 1 ug/10⁶ cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CA2 antibody.



Flow cytometry testing of human SW480 cells with CA2 antibody at 1 ug/10⁶ cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CA2 antibody.

Description

CA2 is a cytosolic enzyme with the highest activity among all known CAs. The carbonic anhydrases (ACs) form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons (or vice versa), a reversible reaction that occurs relatively slowly in the absence of a catalyst. Mutations in the CA2 gene result in the CA II deficiency syndrome, an autosomal recessive disorder that produces osteopetrosis, renal tubular acidosis and cerebral calcification. This gene is mapped to 8q22.

Application Notes

Optimal dilution of the CA2 antibody should be determined by the researcher.

Immunogen

Amino acids S2-K260 from the human protein were used as the immunogen for the CA2 antibody.

Storage

Prior to reconstitution, store at 4oC. After reconstitution, the CA2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

