Data Sheet (Cat.No.TMAY-00879)

Anti-Carbonic Anhydrase 2 Antibody (8K348)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	8K348
Purification:	Protein A

Applications

Verified Activity:	1. Anti-CA2 rabbit monoclonal antibody at 1:10000 dilution. -Lane A: 293T Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. -Developed using the Odyssey technique. -Performed under reducing conditions. -Predicted band size:29 kDa. -Observed band size:30 kDa. 2. CA2 was immunoprecipitated using: -Lane A:0.5 mg 293T Whole Cell Lysate. -2 µL anti-CA2 rabbit monoclonal antibody and 15 µl of 50 % Protein G agarose. -Primary antibody: -Anti-CA2 rabbit monoclonal antibody, at 1:2000 dilution. -Secondary antibody: -Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution. -Developed using the odyssey technique. -Performed under reducing conditions. -Predicted band size: 29 kDa. -Observed band size: 29 kDa
Application:	IP,WB
Recommended	WB: 1:10000-1:50000; IP: 1-4 µL/mg of lysate

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein: Human Carbonic Anhydrase II / CA2 protein (TMPY-01735)

Antigen Species: Human

Synonyms: CAII;Ltw-5;AI131712;Lvtw-5;Ca2;Car-2;carbonic anhydrase II

Research Background

The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. The carbonic anhydrasekl (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase II is one of fourteen forms of human α carbonic anhydrases. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Renal carbonic anhydrase allows the reabsorption of sodium ions in the proximal tubule. Carbonic anhydrase II has been shown to interact with Band 3 and Sodium-hydrogen antiporter 1.