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Product datasheet for TA327047

Carbonic Anhydrase II (CA2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB 1:500 - 1:2000
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human CA2
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	29 kDa
Gene Name:	carbonic anhydrase 2
Database Link:	NP_000058 Entrez Gene 760 Human P00918

View online »

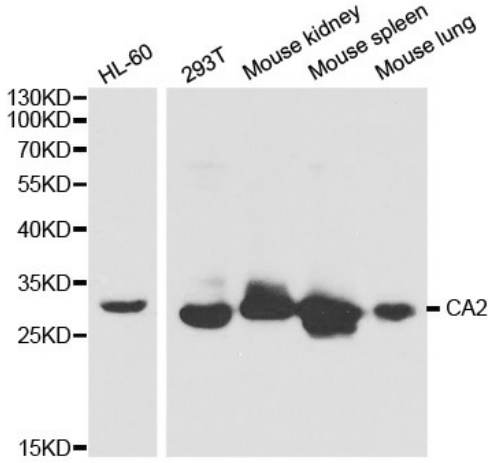
Background: Carbonic anhydrases (CA) are a family of ancient zinc metalloenzymes found in almost all living organisms. All CA can be divided into 3 distinct classes (a, β, and ?) that evolved independently and have no significant homology in sequence and overall folding. All functional CA catalyze the reversible hydration of CO2 into HCO3- and H+ and contain a zinc atom in the active sites essential for catalysis. There are many isoforms of CA in mammals and they all belong to the a class . CA2 is a cytosolic member of the a class. It is the most widely distributed isoform among the mammalian CAs . Defects in CA2 are associated with osteopetrosis and renal tubular acidosis.Elevated expression of CA2 is observed in patients with Alzheimer's disease and the developing brains of Down syndrome patients . CA2 is also overexpressed in Gastrointestinal Stromal Tumors (GISTs) and is considered a useful marker for diagnosis Recently, CA2 was reported to facilitate transporter activity of the monocarboxylate transporter isoform 1 and 4 (MCT1/4) independent of its own catalytic activity

Synonyms: CA-II; CAC; CAII; Car2; HEL-76; HEL-S-282

Protein Families: Druggable Genome

Protein Pathways: Nitrogen metabolism

Product images:



Western blot analysis of extracts of various cell lines, using CA2 antibody.