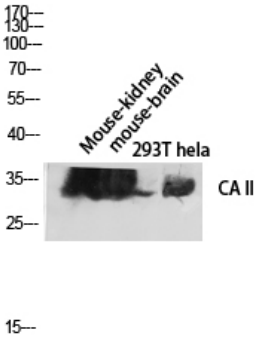
CA II Polyclonal Antibody

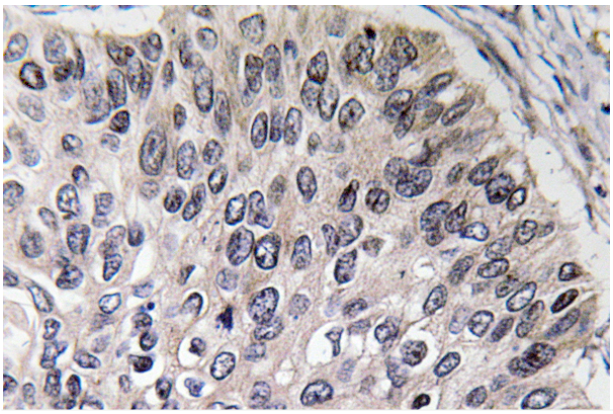
Catalog No	BYab-18919
Isotype	IgG
Reactivity	Human;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	CA2
Protein Name	Carbonic anhydrase 2
Immunogen	The antiserum was produced against synthesized peptide derived from human CA II. AA range:180-229
Specificity	CA II Polyclonal Antibody detects endogenous levels of CA II protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CA2; Carbonic anhydrase 2; Carbonate dehydratase II; Carbonic anhydrase C; CAC; Carbonic anhydrase II; CA-II
Observed Band	29kD
Cell Pathway	Cytoplasm . Cell membrane . Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells. .
Tissue Specificity	Ovary,
Function	catalytic activity:H(2)CO(3) = CO(2) + H(2)O.,cofactor:Zinc.,disease:Defects in CA2 are the cause of autosomal recessive osteopetrosis type 3 (OPTB3) [MIM:259730]; also known as osteopetrosis with renal tubular acidosis, carbonic anhydrase II deficiency syndrome, Guibaud-Vainsel syndrome or marble brain disease. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or

	adulthood. Autosomal recessive osteopetrosis is usually associated with normal or elevated amount of non-functional osteoclasts. OPTB3 is associated with renal tubular acidosis, cerebral calcification (marble brain disease) and in some cases with mental retardation.,function:Essentia
Background	The protein encoded by this gene is one of several isozymes of carbonic anhydrase, which catalyzes reversible hydration of carbon dioxide. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2014],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

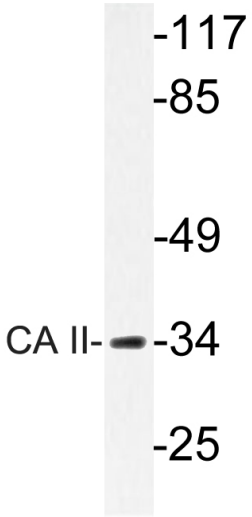
Products Images



Western blot analysis of Mouse-kidney mouse-brain 293T hela lysis using CA II antibody. Antibody was diluted at 1:2000



Immunohistochemistry analysis of CA II antibody in paraffin-embedded human lung carcinoma tissue.



Western blot analysis of lysate from rat heart cells, using CA II antibody.