

CA III Polyclonal Antibody

Catalog No: YT0574

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target: CA III

Fields: >>Nitrogen metabolism;>>Metabolic pathways

Gene Name: CA3

Protein Name: Carbonic anhydrase 3

Human Gene Id: 761

Human Swiss Prot

P07451

No:

Mouse Gene ld: 12350

Mouse Swiss Prot

P16015

No:

Rat Gene ld: 54232

Rat Swiss Prot No: P14141

Immunogen: The antiserum was produced against synthesized peptide derived from human

CA3. AA range:141-190

Specificity: CA III Polyclonal Antibody detects endogenous levels of CA III protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 38kD

Cell Pathway : Nitrogen metabolism;

Background: Carbonic anhydrase III (CAIII) is a member of a multigene family (at least six

separate genes are known) that encodes carbonic anhydrase isozymes. These carbonic anhydrases are a class of metalloenzymes that catalyze the reversible hydration of carbon dioxide and are differentially expressed in a number of cell types. The expression of the CA3 gene is strictly tissue specific and present at high levels in skeletal muscle and much lower levels in cardiac and smooth muscle. A proportion of carriers of Duchenne muscle dystrophy have a higher CA3 level than normal. The gene spans 10.3 kb and contains seven exons and six

introns. [provided by RefSeq, Oct 2008],

Function: catalytic activity:H(2)CO(3) = CO(2) + H(2)O.,cofactor:Zinc.,developmental

stage:At 6 weeks gestation, transcripts accumulate at low levels in the somites and at high levels throughout the notochord. As gestation continues, CA3 becomes abundant in all developing muscle masses and continues at high to moderate levels in the notochord.,function:Reversible hydration of carbon dioxide.,similarity:Belongs to the alpha-carbonic anhydrase family.,tissue

specificity: Muscle specific.,

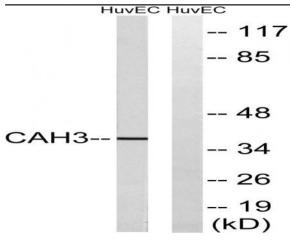
Subcellular Location:

Cytoplasm.

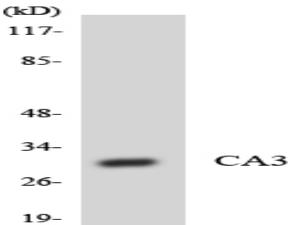
Expression:

Muscle specific.

Products Images



Western blot analysis of lysates from HUVEC cells, using CA3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVECcells using CA3 antibody.