

For Research Use Only

# CA8 Polyclonal antibody

Catalog Number: 12391-1-AP

Featured Product

9 Publications



## Basic Information

### Catalog Number:

12391-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop and 333 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3068

### GenBank Accession Number:

BC015531

### GeneID (NCBI):

767

### UNIPROT ID:

P35219

### Full Name:

carbonic anhydrase VIII

### Calculated MW:

290 aa, 32 kDa

### Observed MW:

32 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IP, IHC, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HEK-293 cells, mouse brain tissue, Jurkat cells, K-562 cells

**IP**: mouse brain tissue,

**IHC**: human gliomas tissue, mouse cerebellum tissue

## Background Information

The CA8 (CARP) gene encodes carbonic anhydrase VIII, which is part of a family of zinc metalloenzyme. CA8 has a central carbonic anhydrase motif, but it lacks carbonic anhydrase activity due to absence of catalytic zinc coordinating residues (PMID:2121526). CARP is a novel IP3R1-binding protein, and is expressed in Purkinje cells abundantly. CA8 is co-localized with IP3R1 in Purkinje cells and it binds to IP3R1, reducing the affinity of the receptor for its ligand, IP3 (PMID:12611586). Defects in CA8 are the cause of cerebellar ataxia mental retardation and dysequilibrium syndrome type 3 (CMARQ3) (PMID:19461874).

## Notable Publications

Author	Pubmed ID	Journal	Application
Huai-Lu Ma	31715371	Biomed Pharmacother	WB, IHC
Ken Asada	33928345	Nucleic Acids Res	IP
LiddeLow Shane A SA	23843944	PLoS One	IHC

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

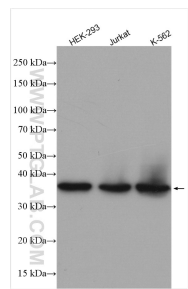
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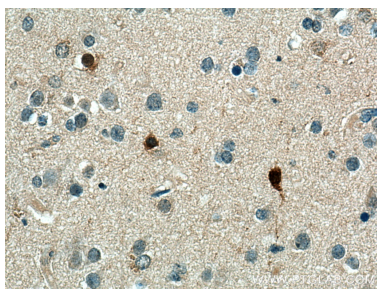
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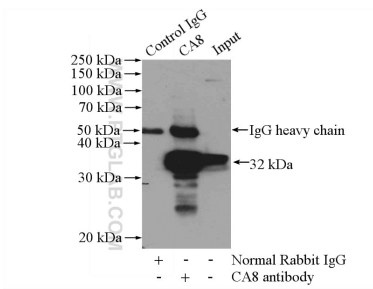
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 12391-1-AP (CA8 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12391-1-AP (CA8 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CA8 (IP:12391-1-AP, 4ug; Detection:12391-1-AP 1:1000) with mouse brain tissue lysate 4000ug.