For Research Use Only

CA8 Polyclonal antibody

Catalog Number:12391-1-AP Featured Product 7 Publications

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Basic Information

Catalog Number:
12391-1-AP

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

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3068

GenBank Accession Number:
BC015531

GeneID (NCBI):
767

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 IP and 1:500-1:2000 for WB
IHC 1:50-1:500

Applications

Tested Applications:
IHC, IP, WB,ELISA

Cited Applications:
IF, IHC, IP, WB

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

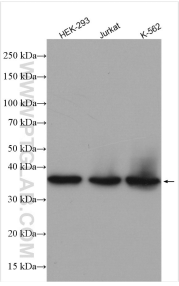
Storage

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

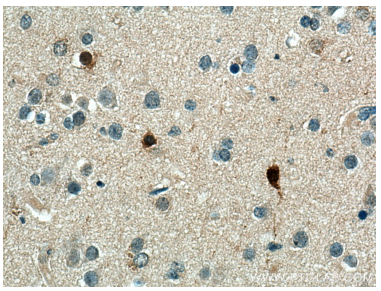
***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

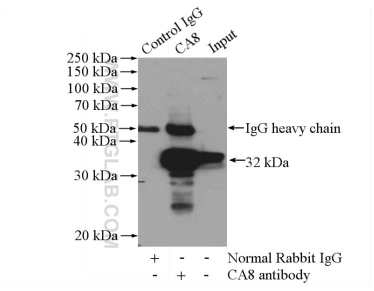
Selected Validation Data



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.