CA12 Polyclonal ANTIBODY
Catalog Number: 15180-1-AP

Basic Information
Catalog Number: 15180-1-AP
Size: 64 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG7107

GenBank Accession Number:
GeneID (NCBI): 771
Full Name: carbonic anhydrase XII
Calculated MW: 39 kDa
Observed MW: 44 kDa, 75-80 kDa

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:500

Applications
Tested Applications:
FC, IHC, WB, ELISA
Cited Applications:
IF, IP, WB
Species Specificity:
human, mouse, rat
Cited Species:
human, mouse, rat

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

Positive Controls:
WB: BxPC-3 cells; C6 cells, HEK-293 cells, PC-3 cells
IHC: human kidney tissue

Background Information
CA12 belongs to the alpha-carbonic anhydrase family. It reversible hydration of carbon dioxide. Overexpression of the zinc enzyme CA12 is observed in certain human cancers. The structure reveals a prototypical CA fold; however, two CA12 domains associate to form an isologous dimer, an observation that is confirmed by studies of the enzyme in solution.

Notable Publications
Author | PMID | Journal | Application
---|---|---|---
Sang-Woo Kim | 28901294 | Nanotechnology | WB
Zhenyu Wang | 29073605 | Cell Physiol Biochem | WB
Jeong Hee Hong | 26488891 | J Physiol | WB, IF

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

For technical support and original validation data for this product please contact:
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E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data

**BxPC-3 cells** were subjected to SDS PAGE followed by western blot with 15180-1-AP (CA12 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human kidney using 15180-1-AP (CA12 antibody) at dilution of 1:50 (under 10x lens).

Immunohistochemical analysis of paraffin-embedded human kidney using 15180-1-AP (CA12 antibody) at dilution of 1:50 (under 40x lens).

1X10^6 HEK-293 cells were stained with 0.2ug CA12 antibody (15180-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA/50 min. Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.