## For Research Use Only

## CA12 Recombinant antibody, PBS Only (Capture)

Catalog Number:85595-3-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

243053B2

**Basic Information** 

Catalog Number: GenBank Accession Number:

85595-3-PBS BC000278
Size: GeneID (NCBI):

100ug , Concentration: 1 mg/ml by 771
Nanodrop:

Nanodrop; UNIPROT ID:
Source: 043570
Rabbit Full Name:

Isotype: carbonic anhydrase XII
IgG Calculated MW:

IgG Calculated MW: Immunogen Catalog Number: 39 kDa

AG7107 Observed MW: 38-45 kDa

**Applications** 

**Tested Applications:** 

WB, Cytometric bead array, Sandwich ELISA, Indirect

ELISA, Sample test Species Specificity:

human, mouse, rat

**Product Information** 

85595-3-PBS targets CA12 as part of a matched antibody pair:

MP01993-1: 85595-3-PBS capture and 85595-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

**Background Information** 

CA12 belongs to the alpha-carbonic anhydrase family. It reverses the 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.

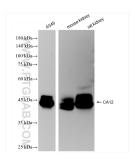
Storage

Storage: Store at -80°C.

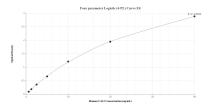
Storage Buffer:

PBS only, pH7.3

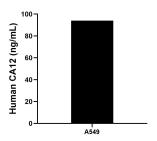
## **Selected Validation Data**



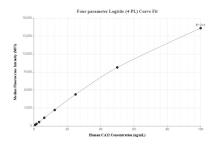
Various lysates were subjected to SDS PAGE followed by western blot with 85595-3-RR (CA12 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85595-3-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP01993-1, Human CA12 Recombinant Matched Antibody Pair-PBS only. 85595-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag7107. 85595-2-PBS was HRP conjugated as the detection antibody. Range: 0.625-40 ng/mL



The mean CA12 concentration was determined to be 93.99 ng/mL in A549 cell extract based on a 3.10 mg/mL extract load.



Cytometric bead array standard curve of MP01993-1, CA12 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85595-3-PBS. Detection antibody: 85595-2-PBS. Standard: Ag7107. Range: 0.781-100 ng/mL