

**Datasheet for 200-1354-0100****Carbonic Anhydrase I Antibody Peroxidase Conjugated****Overview**

|                      |                                                                                 |
|----------------------|---------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Carbonic Anhydrase I (GOAT) Antibody Peroxidase Conjugated - 200-1354-0100 |
| <b>Item No.:</b>     | 200-1354-0100                                                                   |
| <b>Size:</b>         | 100 µg                                                                          |
| <b>Applications:</b> | ELISA, WB                                                                       |
| <b>Reactivity:</b>   | Human                                                                           |
| <b>Host Species:</b> | Goat                                                                            |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Carbonic Anhydrase I is an enzyme that in humans is encoded by the CA1 gene. Carbonic anhydrases are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including cellular respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. |
| <b>Synonyms:</b>     | goat anti-Carbonic Anhydrase I Antibody HRP Conjugation, Peroxidase Conjugated goat anti-Carbonic Anhydrase I Antibody, Car1 antibody, Carbonate dehydratase I antibody, Carbonic anhydrase 1 antibody, Carbonic anhydrase B antibody, Carbonic dehydratase antibody, ECK0125 antibody, yadF antibody                                                                                                                             |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Conjugate:</b>    | Peroxidase (HRP)                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Target Details**

|                        |                                            |
|------------------------|--------------------------------------------|
| <b>Gene Name:</b>      | CA1                                        |
| <b>Reactivity:</b>     | Human                                      |
| <b>Immunogen Type:</b> | Native Protein                             |
| <b>Immunogen:</b>      | Carbonic Anhydrase I [Human Erythrocytes ] |

**Purity/Specificity:** Carbonic Anhydrase I is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Goat Serum as well as purified and partially purified Carbonic Anhydrase I [Human Erythrocytes ]. Cross reactivity against Carbonic Anhydrase I from other tissues and species may occur but have not been specifically determined.

**Relevant Links:**

- [UniProtKB - P00915](#)
- [NCBI - NP\\_001122301.1](#)
- [GeneID - 759](#)

## Application Details

|                             |                                                                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                      |
| <b>Application Note:</b>    | Anti-Carbonic Anhydrase I peroxidase is tested by ELISA and western blot and useful in immunohistochemistry. Optimal titers should be obtained by researchers. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                |
| <b>ELISA:</b>               | 1:5,000 - 1:20,000                                                                                                                                             |
| <b>IHC:</b>                 | 1:500 - 1:2,500                                                                                                                                                |
| <b>WB:</b>                  | 1:1,000 - 1:5,000                                                                                                                                              |

## Formulation

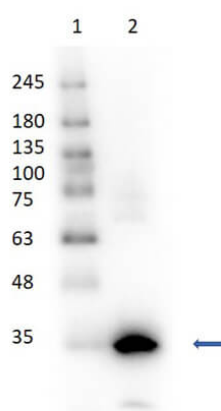
|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 1.0 mg/mL by UV absorbance at 280 nm                                   |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2             |
| <b>Preservative:</b>          | 0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!               |
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 100 µL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
|----------------------------|---------|

|                           |                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Condition:</b> | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>        | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Images



### Western Blot

Western Blot of Goat Anti-Carbonic Anhydrase I Antibody Peroxidase Conjugated. Lane 1: Opal Prestained Molecular Weight (p/n MB-210-0500). Lane 2: Carbonic Anhydrase I [10µg]. Primary antibody: Anti-Carbonic Anhydrase I HRP Antibody at 1:1000 for 1 hr at RT. Secondary antibody: Streptavidin-HRP antibody (p/n S000-03) at 1:40,000 for 30mins at RT. Block: BlockOut (p/n MB-073). Predicted/Observed size: ~29kDa.

## Disclaimer

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