

Datasheet for 200-1654S**Carbonic Anhydrase I Antibody Biotin Conjugated****Overview**

Description:	Anti-Carbonic Anhydrase I (GOAT) Antibody Biotin Conjugated - 200-1654S
Item No.:	200-1654S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. Carbonic Anhydrase 1 (CA1) is closely related to Carbonic Anhydrase 2 (CA2) and Carbonic Anhydrase 3 (CA3), and it is a cytosolic protein that is found at the highest level in erythrocytes. Anti-Carbonic anhydrase I antibody is ideal for investigators involved in serum protein components.
Synonyms:	goat anti-Carbonic Anhydrase I Antibody biotin Conjugation, biotin 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
Host Species:	Goat
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CA1
Reactivity:	Human

Immunogen Type:	Native Protein
Immunogen:	Carbonic Anhydrase I [Human Erythrocytes]
Purity/Specificity:	Anti-CARBONIC ANHYDRASE I (GOAT) Antibody 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-Biotin, anti-Goat Serum as well as purified and partially purified Carbonic Anhydrase I [Human Erythrocytes]. Cross reactivity against Carbonic Anhydrase I from other sources may occur but has not been specifically determined.
Relevant Links:	• UniProtKB - P00915 • NCBI - NP_001122301.1 • GeneID - 759

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Carbonic anhydrase I Biotin Antibody has been tested by ELISA and western blot. This product is assayed against 1.0 ug of Carbonic Anhydrase I in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:4,000 to 1:20,000 of the reconstitution concentration is suggested for this product. Specific conditions should be optimized by researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
WB:	1:500 - 1:2,000

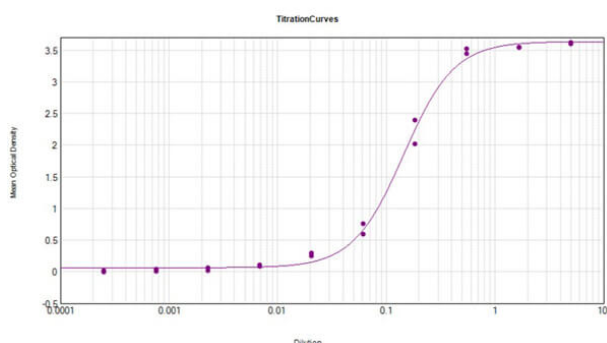
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



ELISA

ELISA Results of Goat Anti-Carbonic Anhydrase I Antibody Biotin Conjugated tested against purified Carbonic Anhydrase I Biotin. Each well was coated in duplicate with 1.0 µg of Carbonic Anhydrase I. The working dilution is 1:6900. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using HRP Conjugate Stabilizer (p/n MB-076), Streptavidin-HRP conjugated (p/n S000-03), and TMB substrate (p/n TMBE-1000).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.