

Datasheet for 100-401-B14S**Liver Carboxylesterase-1 Antibody****Overview**

Description:	Anti-Human Liver Carboxylesterase-1 (RABBIT) Antibody - 100-401-B14S
Item No.:	100-401-B14S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Carboxylesterases (CES) are ubiquitous enzymes responsible for the hydrolysis of endogenous substrates with ester, thioester, or amide bonds and of xenobiotics (effecting detoxification or drug metabolism). Drug half-life and bioavailability may be modulated by selective inhibition of these proteins. CES1 or hCE1 (also known as acyl coenzyme A:cholesterol acyltransferase, monocyte/macrophage serine esterase, HMSE, serine esterase 1, brain carboxylesterase, triacylglycerol hydrolase, egasyn and retinyl ester hydrolase) is responsible for hydrolysis of stored cholesterol esters in macrophage foam cells and release of free cholesterol for high density lipoprotein-mediated cholesterol efflux.
Synonyms:	rabbit anti-Liver Carboxylesterase-1 Antibody, Liver carboxylesterase 1, Acyl coenzyme A:cholesterol acyltransferase, ACAT, Monocyte/macrophage serine esterase, HMSE, Serine esterase 1, Brain carboxylesterase hBr1, Triacylglycerol hydrolase, Egasyn, Retinyl ester hydrolase, REH
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CES1
Reactivity:	Human
Immunogen Type:	Recombinant Protein

Immunogen:	This whole rabbit serum was prepared by repeated immunizations with recombinant human Liver Carboxylesterase-1.
Purity/Specificity:	This product was prepared from monospecific antiserum by delipidation and defibrination. The antibody detects recombinant hCE1 in cell lysates and native Liver Carboxylesterase-1 present in human tissue or fluids in various assays (ie. IL-1 stimulated hCE1 production from fibroblasts).
Relevant Links:	• UniProtKB - P23141 • NCBI - 68508965 • GeneID - 1066

Application Details

Tested Applications:	ELISA, WB
Application Note:	This antibody has been tested for use in ELISA and western blotting and is specific for human CE1 (carboxylesterase). Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 66 kDa in size corresponding CE1 by western blotting in the appropriate cell lysate or extract. In western blot analysis endogenous protein present in human tissue or fluids, multiple bands of CE may appear corresponding to variable amount of glycosylation on the molecule.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IP:	1:100
WB:	1:2,500 – 1:5,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	90 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

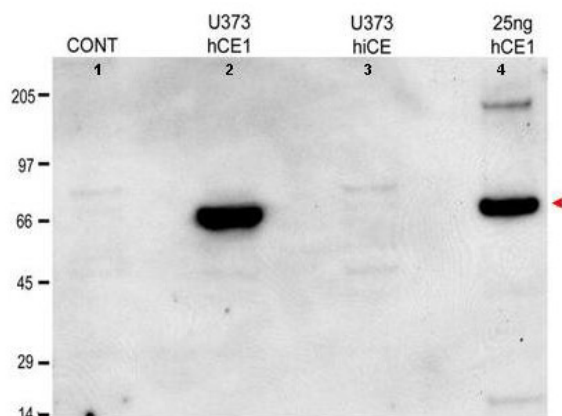
Shipping & Handling

Shipping Condition:	Dry Ice
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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 three (3) months from date of receipt.

Images



Western Blot

Western blot using Rockland's anti-hCE1 shows detection of hCE1 (arrowhead) transfected into U373 MG (glioblastoma) whole cell lysate (lane 2) as a 66 kDa band. Purified hCE1 (lane 4) is similarly detected. The higher molecular weight band in lane 4 may represent a trimeric form of hCE1. No reactivity is seen in the untransfected control (lane 1). No cross reactivity occurs against the human intestinal form of CES1 (lane 3). The primary antibody was used at a 1:2,500 dilution to detect purified hCE1. Personal communication, Philip Potter and Jason Hatfield, St. Jude Children's Research Hospital, Memphis, TN.

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.