

Datasheet for 600-401-EE3**SCO2 Antibody****Overview**

Description:	Anti-SCO2 (RABBIT) Antibody - 600-401-EE3
Item No.:	600-401-EE3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Synthesis of cytochrome c oxidase 2 was initially identified in yeast as one of two cytochrome c oxidase (COX) assembly proteins that enable the assembly of cytochrome c holoenzyme, a complex that catalyzes the transfer of reducing equivalents from cytochrome c to molecular oxygen and pumps protons across the inner mitochondrial membrane. Like their yeast homologs, the function of both SCO2 and SCO1 are dependent on copper ion binding. Recent studies suggest that SCO2 expression is regulated by p53, so that a decrease in p53 expression, such as in numerous tumors and cells lines, the drop in SCO2 expression leads to a shift from normal aerobic respiration towards the production of glycolytic ATP. Defects in the SCO2 protein are also associated with fatal infantile cardioencephalomyopathy and COX deficiency.
Synonyms:	SCO2 Antibody, SCOD1, Protein SCO2 homolog, mitochondrial
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SCO2
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-SCO2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid synthetic peptide from near the C-terminus of human SCO2.
Purity/Specificity:	Anti-SCO2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with SCO2 from other sources has not been determined.
Relevant Links:	• UniProtKB - O43819 • GeneID - 6341 • NCBI - O43819

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-SCO2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 30 kDa in Western Blots of specific cell lysates and tissues.
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
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	.5-2 µg/mL

Formulation

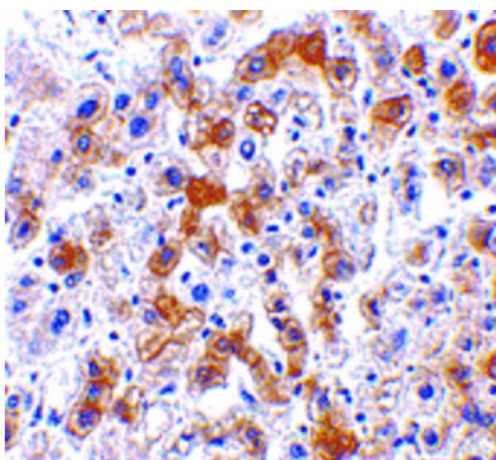
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

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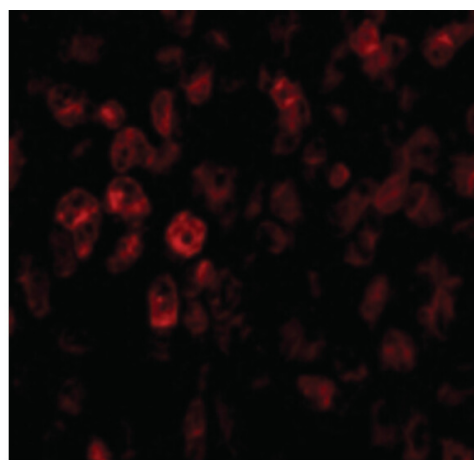
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Images



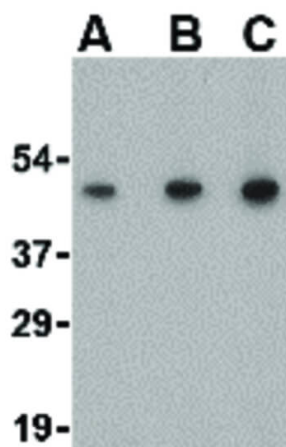
Immunohistochemistry

Immunohistochemistry of SCO2 antibody. Tissue: Human liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: SCO2 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SCO2 is nuclear and cytoplasmic. Staining: SCO2 as precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of SCO2 antibody. Tissue: Human liver cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: SCO2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: SCO2 as red fluorescent signal.

**Western Blot**

Western Blot of SCO2 antibody. Lane A: Human liver tissue lysate at 0.5 $\mu\text{g/mL}$. Lane B: Human liver tissue lysate at 1 $\mu\text{g/mL}$. Lane C: Human liver tissue lysate at 2 $\mu\text{g/mL}$. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 29.8 kDa, 49 kDa for SCO2.

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.