

Datasheet for 200-901-EL5**SIRT1 Antibody****Overview**

Description:	Anti-SIRT1 (CHICKEN) Antibody - 200-901-EL5
Item No.:	200-901-EL5
Size:	100 µg
Applications:	ELISA, IF, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Chicken

Product Details

Background:	The Silent Information Regulator (SIR2) family of genes are highly conserved from prokaryotes to eukaryotes and have important functions in the regulation of metabolism, growth and differentiation, inflammation, cellular survival, as well as in senescence and lifespan extension. Sirtuins, including SIRT1-7, are human homologs of yeast Sir2p. Sirtuins are NAD ⁺ -dependent histone/protein deacetylases (HDAC) which regulate cellular metabolism, e.g. energy metabolism, and thereby are associated with aging and several age-related diseases. SIRT1 has the closest homology to the yeast Sir2p and is widely expressed in fetal and adult tissues. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically via lysine residue.
Synonyms:	SIRT1 Antibody, SIR2L1, SIR2L1, NAD-dependent protein deacetylase sirtuin-1, Regulatory protein SIR2 homolog 1, hSIRT1
Host Species:	Chicken
Clonality:	Polyclonal
Format:	IgY

Target Details

Gene Name:	SIRT1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-SIRT1 antibody was prepared from chicken egg fractions produced by repeated immunizations with a 19 amino acid synthetic peptide near the N-terminus of human SIRT1.
Purity/Specificity:	Anti-SIRT1 Antibody is an IgY fraction that has been affinity purified by immunoaffinity purification. Cross reactivity with SIRT1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q96EB6 • GeneID - 23411 • NCBI - NP_036370

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-SIRT1 Antibody has been tested for use in ELISA, Western Blotting and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 82 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:	1:10,000
IF:	20 µg/mL
WB:	1 µg/mL

Formulation

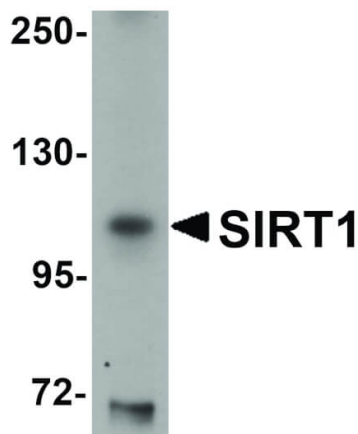
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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:

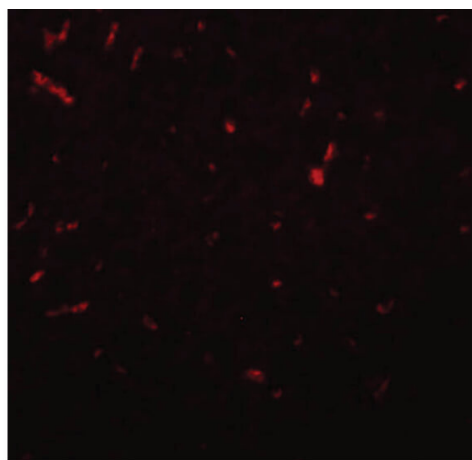
Expiration date is one (1) year from date of receipt.

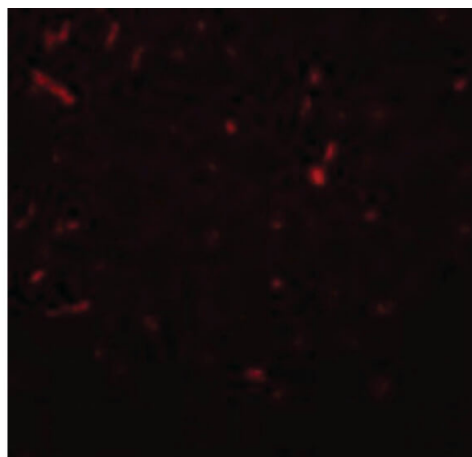
Images**Western Blot**

Western Blot of SIRT1 antibody. Lane 1: Mouse liver tissue lysate with SIRT1 antibody at 1 μ g/mL. Secondary antibody: Peroxidase chicken secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 82 kDa, 100 kDa for SIRT1. Other band(s): SIRT1 splice variants and isoforms.

Immunofluorescence Microscopy

Immunofluorescence Microscopy of SIRT1 antibody. Tissue: Mouses liver tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: SIRT1 antibody at 20 μ g/mL for 1 h at RT. Secondary antibody: Fluorescein chicken secondary antibody at 1:10,000 for 45 min at RT. Localization: SIRT1 is nuclear and cytoplasmic. Staining: SIRT1 as red fluorescent signal.



**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of SIRT1 antibody. Tissue: Mouses liver tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: SIRT1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein chicken secondary antibody at 1:10,000 for 45 min at RT. Localization: SIRT1 is nuclear and cytoplasmic. Staining: SIRT1 as red fluorescent signal.

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.