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Datasheet for 600-401-098

Biotin Antibody

Overview

Description:	Anti-Biotin (RABBIT) Antibody - 600-401-098
Item No.:	600-401-098
Size:	100 µg
Applications:	ELISA, EM, IF, Multiplex, WB
Reactivity:	Biotin
Host Species:	Rabbit

Product Details

Background:	Biotin Antibody detects Biotin. Biotin is a water-soluble B-complex vitamin (vitamin B7). It is composed of a ureido (tetrahydroimidizalone) ring fused with a tetrahydrothiophene ring. A valeric acid substituent is attached to one of the carbon atoms of the tetrahydrothiophene ring. Biotin is a coenzyme for carboxylase enzymes, involved in the synthesis of fatty acids, isoleucine, and valine, and in gluconeogenesis. Biotin is necessary for cell growth, the production of fatty acids, and the metabolism of fats and amino acids. Anti-Biotin Antibody is ideal for investigators involved in Cell Signaling and Cell Biology research.
Synonyms:	rabbit anti Biotin Antibody, rabbit anti-biotin Antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Biotin
Immunogen Type:	Other
Immunogen:	Biotin conjugated to Keyhole Limpet Hemocyanin (KLH)
Purity/Specificity:	Biotin Antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Biotin coupled to sepharose beads. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, Biotin conjugated IgG and Biotin conjugated Bovine Serum Albumin.

Application Details

Tested Applications:	ELISA
Suggested Applications:	EM, IF, Multiplex, WB (Based on references)
Application Note:	Anti-Biotin Antibody has been tested by ELISA and is suitable for immunoprecipitation, immunodiffusion, conjugation and most immunological methods requiring lot-to-lot consistency, high titer and specificity.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:200,000
IHC:	User Optimized
WB:	1:2,000 - 1:10,000

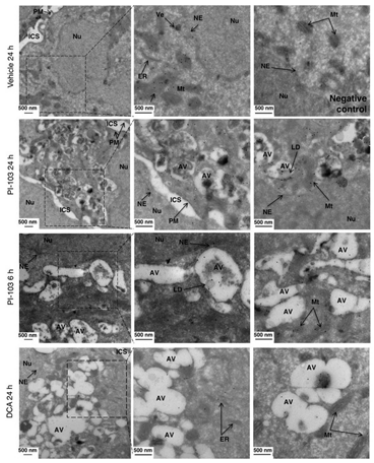
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.3 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:	None

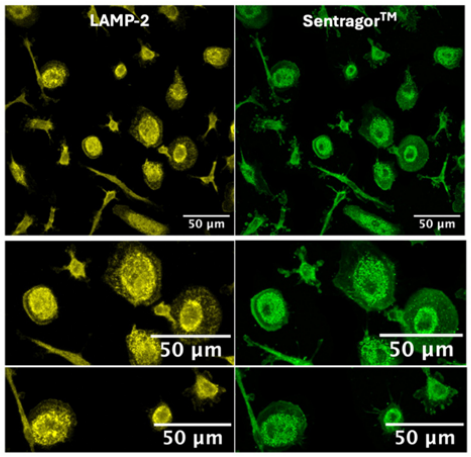
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	This product is stable for several weeks at 4° C as an undiluted liquid. 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. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

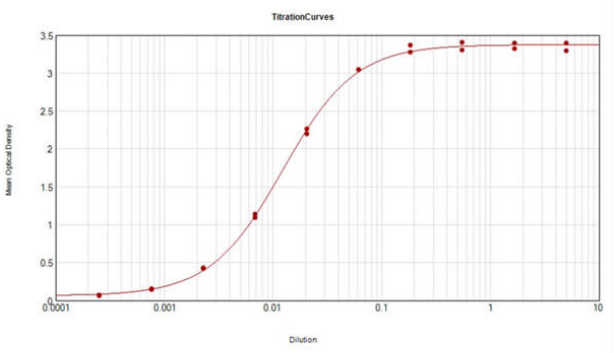
Images



Immunofluorescence Microscopy
Localization of Pro-ChoPLs during drug-induced autophagy. Imaging of Pro-ChoPLs in 20 µM PI-103 (24 h and 6 h), and in 75 mM DCA (24 h)-treated HCT116 BAX-ko cells by immuno-electron microscopy. Pro-Cho was added together with the vehicle- or PI-103 treatment, but in the last 6 h of DCA treatment to adjust for the difference in the timing of autophagy onset between the two treatments (Figure S2). No Pro-Cho was added for the negative, vehicle-treated control. The cells were fixed, sectioned and Pro-ChoPLs reacted with biotin-azide. The sections were incubated with anti-biotin antibodies (p/n 600-401-098) and protein A gold, counterstained with uranyl acetate and imaged by transmission electron microscopy. Arrows indicate various cellular structures: AV, autophagic vacuole; ER, endoplasmic reticulum; ICS, intercellular space; Mt, mitochondrion; NE, nuclear envelope; Nu, nucleus; PM, plasma membrane; Ve, vesicle. Fig 3. PMID: 31517566



Immunofluorescence Microscopy
Colocalization of ceroids and LAMP-2 (lysosomal marker) in the Mox50 model (representative images obtained from one donor, n = 3, with a Leica TCS SP5 microscope). Rabbit anti-biotin (p/n 600-401-098) antibody was used to directly detect biotin in the SenTraGor® reagent. Fig 8.
PMID: 39337629



ELISA
ELISA Results of purified Rabbit Anti-Biotin Antibody tested against BSA-Biotin of immunogen. Each well was coated in duplicate with 1.0µg of conjugate. 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 Blocking buffer (p/n MB-060-1000), Goat anti-Rabbit IgG HRP conjugated (p/n 611-103-122), and TMB substrate (p/n TMBE-1000).

References

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- Jung, H et al. Detecting protein-ligand binding on supported bilayers by local pH modulation. *Journal of the American Chemical Society* (2009)
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