

# Clathrin, Light Chain Monoclonal Mouse Antibody (CLC/1421)

## Product Description

This antibody recognizes proteins of 31-44 kDa, which are identified as Clathrin Light Chains (both A & B). Clathrin is composed of three heavy chains and three light chains, which associate non-covalently to form a triskelion structure. Clathrin light chain regulates the self-assembly of triskelions onto intracellular membranes. Clathrin light chain subunits (LCA and LCB) contribute to regulation of coated vesicle formation to sort proteins during receptor-mediated endocytosis and organelle biogenesis. LCA and LCB are encoded by two discrete genes. They share only 60% homology, and have certain features in common. Both LCA and LCB undergo alternative mRNA splicing, which results in the generation of tissue-specific isoforms.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1421, Anti-Clathrin, Light Chain (CLC/1421)**

## Product attributes

<b>Antibody number</b>	#1421
<b>Antibody reactivity (target)</b>	Clathrin, Light Chain
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	CLC/1421
<b>Isotype</b>	IgG2b, kappa
<b>Molecular weight</b>	31-44 kDa
<b>Synonyms</b>	Clathrin light chain A; Clathrin light chain B; Clathrin light chain LCA; Clathrin light chain LCB; Clathrin light polypeptide A; Clathrin light polypeptide B; Clathrin, light polypeptide (Lca); Clathrin, light polypeptide (Lcb); CLTA; CLTB
<b>Human gene symbol</b>	CLTA, CLTB
<b>Entrez gene ID</b>	1211, 1212
<b>SwissProt</b>	P09496, P09497
<b>Unigene</b>	484241, 522114
<b>Immunogen</b>	Purified recombinant N-terminal fragment of human Clathrin Light Chain
<b>Verified antibody applications</b>	IHC (FFPE) (verified)
<b>Antibody target cellular localization</b>	Cytoplasmic, Lysosomes, Vesicular
<b>Species reactivity</b>	Human
<b>Antibody application notes</b>	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL. Immunohistology (formalin): 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min. Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	HeLa cells. Placenta or Prostate Carcinoma.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
<b>Antibody research areas</b>	Membrane trafficking
<b>Product origin</b>	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on January 10, 2025 at 07:58:21 PM. Visit product page to check for updated information before use.

Product link: <https://biotium.com/product/mouse-monoclonal-anti-clathrin-light-chain-clc1421/>