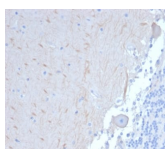


# Autophagy Protein 5 (ATG5) Monoclonal Mouse Antibody (ATG5/2101)



## Product Description

Autophagy protein 5 (ATG5), in combination with autophagy protein 12, functions as an E1-like activating enzyme in a ubiquitin-like conjugating system. ATG5 is involved in several cellular processes, including autophagic vesicle formation, mitochondrial quality control after oxidative damage, negative regulation of the innate antiviral immune response, lymphocyte development and proliferation, MHC II antigen presentation, adipocyte differentiation, and apoptosis. The ATG5 protein is essential for autophagy, a process that is usually beneficial for cells to self-degrade their own components when they are no longer useful.

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 2101, Anti-ATG5 (ATG5/2101)**

## Product attributes

research-areas	Membrane trafficking, Metabolism
Antibody number	#2101
Antibody reactivity (target)	ATG5, Autophagy protein 5
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	ATG5/2101
Isotype	IgG1, kappa
Molecular weight	50-32 kDa
Synonyms	Autophagy protein 5; ATG5; Autophagy related 5; APG5-like; Apoptosis-specific protein
Human gene symbol	ATG5
Entrez gene ID	9474
SwissProt	Q9H1Y0
Unigene	486063
Immunogen	Recombinant fragment of human ATG5 protein (around aa 1-119) (exact sequence is proprietary)
Antibody target cellular localization	Cytoplasmic
Verified antibody applications	IHC (FFPE) (verified), WB (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, ELISA: For coating use Ab at 1-5 ug/mL order Ab without BSA, Immunohistology (formalin): 1-2 ug/mL for 30 minutes at RT, Western Blot 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 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user
Positive control	THP-1, PANC-1, Raji or HeLa cells. Brain, Ovary, Endometrium, Colon or Duodenum
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	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
Validated in protein array	Monospecific
Antibody research areas	Metabolism
Product origin	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	

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