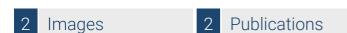


Datasheet for ABIN740190 anti-ATG7 antibody (AA 21-120)





Overview	
Quantity:	100 μL
Target:	ATG7
Binding Specificity:	AA 21-120
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATG7 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))
Product Details	
Immunogen:	KLH conjugated synthetic peptide derived from human ATG7
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Dog,Cow,Pig,Horse,Chicken
Purification:	Purified by Protein A.
Target Details	
Target:	ATG7

Target Details

Alternative Name:	Apg7 (ATG7 Products)
Background:	Synonyms: GSA7, APG7L, APG7-LIKE, Ubiquitin-like modifier-activating enzyme ATG7, ATG12-
	activating enzyme E1 ATG7, Autophagy-related protein 7, hAGP7, Ubiquitin-activating enzyme
	E1-like protein, ATG7
	Background: E1-like activating enzyme involved in the 2 ubiquitin-like systems required for
	cytoplasm to vacuole transport (Cvt) and autophagy. Activates ATG12 for its conjugation with
	ATG5 as well as the ATG8 family proteins for their conjugation with phosphatidylethanolamine.
	Both systems are needed for the ATG8 association to Cvt vesicles and autophagosomes
	membranes. Required for autophagic death induced by caspase-8 inhibition. Required for
	mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the
	mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS
	production. Modulates p53/TP53 activity to regulate cell cycle and survival during metabolic
	stress. Plays also a key role in the maintenance of axonal homeostasis, the prevention of
	axonal degeneration, the maintenance of hematopoietic stem cells, the formation of Paneth cel
	granules, as well as in adipose differentiation.
Gene ID:	10533
UniProt:	095352
Pathways:	Response to Water Deprivation, Autophagy
Application Details	
Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	15(100) 1 50 000
	IF(ICC) 1:50-200
Restrictions:	For Research Use only
Restrictions: Handling	

Handling

Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

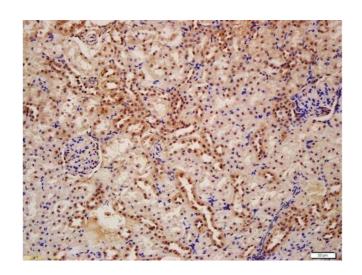
Publications

Product cited in:

Dong, Xing, Su, Liang, Tian, Gao, Wang, Zhang: "Tetrahydroxystilbene Glycoside Improves Microvascular Endothelial Dysfunction and Ameliorates Obesity-Associated Hypertension in Obese ZDF Rats Via Inhibition of Endothelial Autophagy." in: **Cellular physiology and biochemistry: international journal of experimental cellular physiology, biochemistry, and pharmacology**, Vol. 43, Issue 1, pp. 293-307, (2017) (PubMed).

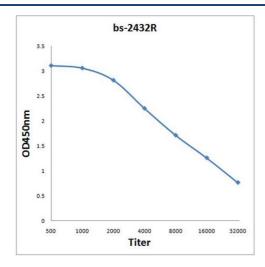
Song, Kou, Zou, Gao, Zeng, Xie: "Involvement of autophagy in tri-ortho-cresyl phosphate-induced delayed neuropathy in hens." in: **Neurochemistry international**, Vol. 64, pp. 1-8, (2013) (PubMed).

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin embedded rat kidney labeled with Anti-APG7 Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining



ELISA

Image 2. Antigen: $0.2 \mu g/100 \mu L$ Primary: Antiserum, 1:500, 1:1000, 1:2000, 1:4000, 1:8000, 1:16000, 1:32000; Secondary: HRP conjugated Goat Anti-Rabbit IgG at 1: 5000; TMB staining; Read the data in Microplate Reader by 450nm