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Datasheet for ABIN388521

anti-ATG7 antibody (AA 284-313)

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Overview

Quantity:	400 µL
Target:	ATG7
Binding Specificity:	AA 284-313
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATG7 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This ATG7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 284-313 amino acids from the Central region of human ATG7.
Clone:	RB7469
Isotype:	Ig Fraction
Predicted Reactivity:	C, Rat
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	ATG7
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Target Details

Alternative Name: [ATG7 \(ATG7 Products\)](#)

Background: Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). APG7 functions as an E1 enzyme essential for multisubstrates such as GABARAPL1 and ATG12. APG3L is an E2-like conjugating enzyme facilitating covalent binding of APG8 (MAP1LC3) to phosphatidylethanolamine (PE). APG7 (an E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with APG3. Formation of the PE conjugate is essential for autophagy.

Molecular Weight: 77960

Gene ID: 10533

NCBI Accession: [NP_001129503](#), [NP_001138384](#), [NP_006386](#)

UniProt: [O95352](#)

Pathways: [Response to Water Deprivation](#), [Autophagy](#)

Application Details

Application Notes: WB: 1:1000. WB: 1:1000. IHC-P: 1:50~100

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C,-20 °C

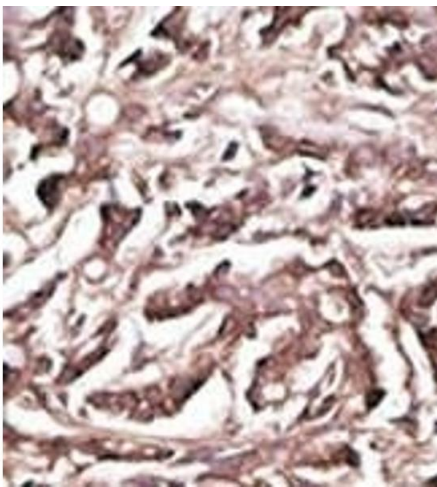
Storage Comment: Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.

Expiry Date: 6 months

Publications

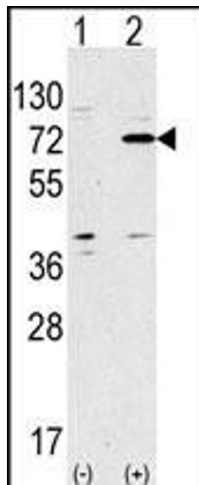
Product cited in: Wang, Liu, Zhao, Song, Wang, Wang, Sun: "Phosphorylation of CDK2 on threonine 160 influences silencing of sex chromosome during male meiosis." in: **Biology of reproduction**, Vol. 90, Issue 6, pp. 138, (2014) ([PubMed](#)).

Images



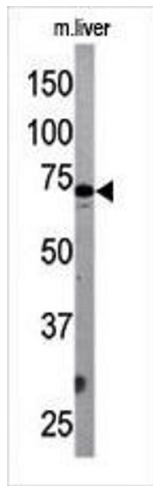
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.



Western Blotting

Image 2. Western blot analysis of anti-ATG7 Antibody (Center) Pab (ABIN388521 and ABIN2849641) in 293 cell line lysates transiently transfected with the ATG7 gene (2 μ g/lane). hG7L-(arrow) was detected using the purified Pab.



Western Blotting

Image 3. The ATG7 Antibody (Center) Pab (ABIN388521 and ABIN2849641) is used in Western blot to detect G7L in mouse liver tissue lysate. G7L (arrow) was detected using the purified Pab.