Datasheet for ABIN1944848

anti-ATG4D antibody (C-Term)

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Overview

Quantity:	400 µL
Target:	ATG4D
Binding Specificity:	AA 441-470, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATG4D antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This ATG4D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 441-470 amino acids from the C-terminal region of human ATG4D.
Clone:	RB7567
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	ATG4D
Alternative Name:	ATG4D (ATG4D Products)

Target Details

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). APG4 is a cysteine protease required for autophagy, which cleaves the C-terminal part of either MAP1LC3, GABARAPL2 or GABARAP, allowing the liberation of form I. A subpopulation of form I is subsequently converted to a smaller form (form II). Form II, with a revealed C-terminal glycine, is considered to be the phosphatidylethanolamine (PE)-conjugated form, and has the capacity for the binding to autophagosomes.
Molecular Weight:	52922
Gene ID:	84971
NCBI Accession:	NP_001268433, NP_116274
UniProt:	Q86TL0
Pathways:	Autophagy

Application Details

Application Notes:	IF: 1:100. 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
Expiry Date:	6 months

Publications

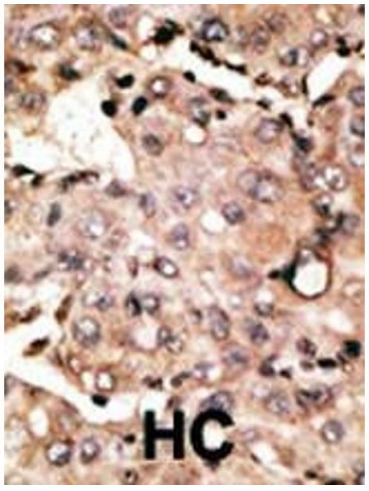
Product cited in:

Huang, Wang, Xu, Lu, Xu, Li, Zhou, Sha: "Expression of a novel RAD23B mRNA splice variant in the human testis." in: **Journal of andrology**, Vol. 25, Issue 3, pp. 363-8, (2004) (PubMed).

Humphray, Oliver, Hunt, Plumb, Loveland, Howe, Andrews, Searle, Hunt, Scott, Jones, Ainscough, Almeida, Ambrose, Ashwell, Babbage, Babbage, Bagguley, Bailey, Banerjee, Barker, Barlow, Bates, Beasley et al.: "DNA sequence and analysis of human chromosome 9. ..." in: **Nature**, Vol. 429, Issue 6990, pp. 369-74, (2004) (PubMed).

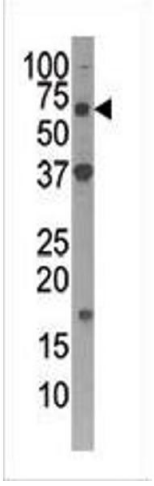
Masutani, Sugasawa, Yanagisawa, Sonoyama, Ui, Enomoto, Takio, Tanaka, van der Spek, Bootsma: "Purification and cloning of a nucleotide excision repair complex involving the xeroderma pigmentosum group C protein and a human homologue of yeast RAD23." in: **The EMBO journal**, Vol. 13, Issue 8, pp. 1831-43, (1994) (PubMed).

Images



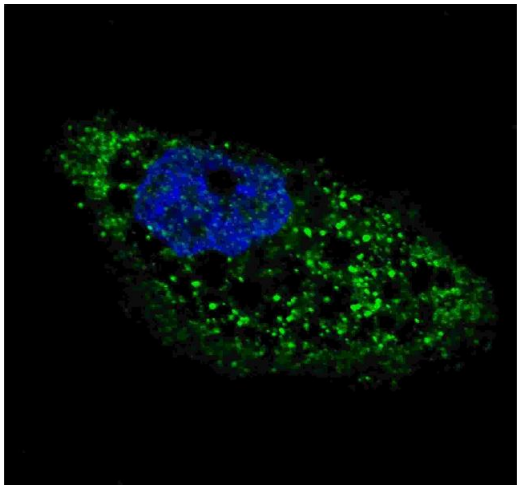
Immunohistochemistry (Paraffin-embedded Sections)

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 G4D Pab in Y79 cell lysate 1811c.



Immunofluorescence

Image 3. Fluorescent image of cells stained with ATG4D (C-term) antibody. cells were treated with Chloroquine (50 µM,16h), then fixed with 4 % PFA (20 min), permeabilized with Triton X-100 (0.2 %, 30 min). Cells were then incubated with (ABIN1944848 and ABIN2849622) ATG4D (C-term) primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/mL, 5 min). ATG4D immunoreactivity is localized to autophagic vacuoles in the cytoplasm of cells.

Please check the product details page for more images. Overall 4 images are available for ABIN1944848.