

Product Name: KD-Validated ATG4B Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01413**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 44.3kDa

Antigen Information

Gene Name	ATG4B ATG4B; Autophagy Related 4B Cysteine Peptidase; AUTL1; KIAA0943; APG4B; Autophagy-Related Cysteine Endopeptidase 1; Autophagy-Related Protein 4 Homolog B; AUT-Like 1 Cysteine Endopeptidase; Cysteine Protease ATG4B; Autophagin-1; HsAPG4B; HAPG4B; ATG4
Alternative Names	Autophagy Related 4 Homolog B (S. Cerevisiae); APG4 Autophagy 4 Homolog B (S. Cerevisiae); Autophagy Related 4B, Cysteine Peptidase; ATG4 Autophagy Related 4 Homolog B; APG4 Autophagy 4 Homolog B; DKFZp586D1822; DKFZP586D1822; EC 3.4.22.-; EC 3.4.22; Apg4B
Gene ID	23192.0
SwissProt ID	Q9Y4P1
Immunogen	A synthesized peptide derived from human Atg4B

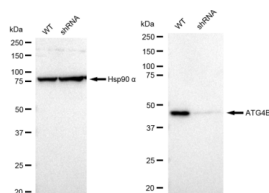
Background

Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

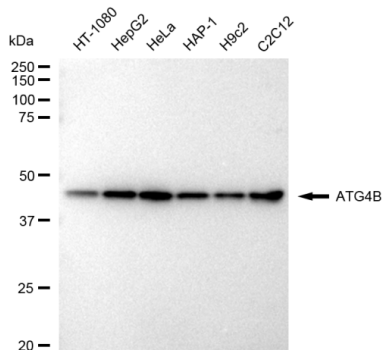
Research Area

Cancer, Cell Biology, Cardiovascular, Metabolism, Neuroscience

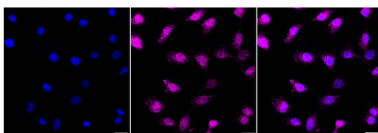
Image Data



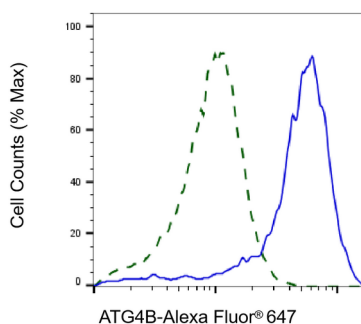
Western blotting analysis using ATG4B antibody (KVAb01413). ATG4B expression in wild type (WT) and ATG4B shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ATG4B antibody (KVAb01413, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



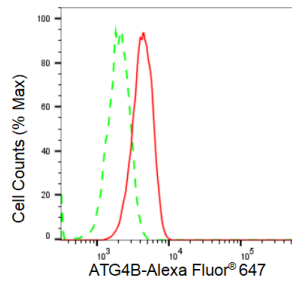
Western blotting analysis using ATG4B antibody (KVAb01413). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATG4B antibody (KVAb01413, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of C2C12 cells with ATG4B antibody (KVAb01413, 1:1,000). Nuclei were stained blue with DAPI; ATG4B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Low. Scale bar: 20 µm.



Validation of ATG4B knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ATG4B antibody (KVAb01413, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ATG4B expression in C2C12 cells using ATG4B antibody (KVA01413, 1:2,000). Green, isotype control; red, ATG4B.