[KD Validated] Anti-ATG7 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021868

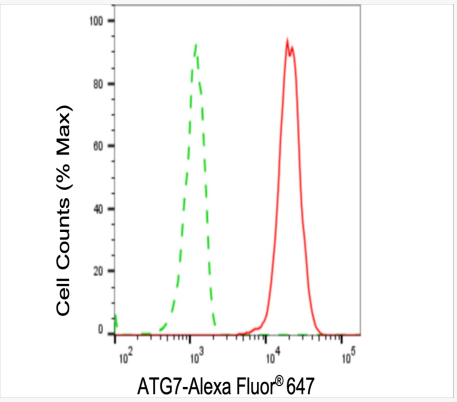
Product Information

Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:10,000~1:50,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	18P51L70
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human ATG7
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-ATG7 Rabbit mAb [18P51L70] is for research use only and not for use in diagnostic or therapeutic procedures.

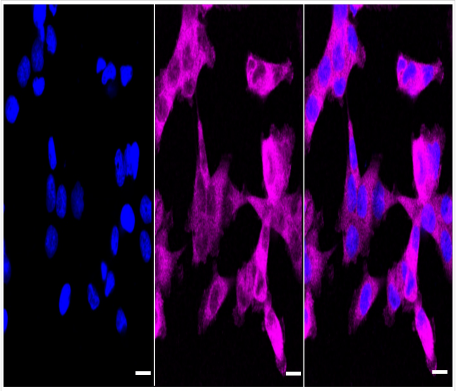
Protein Information

Synonyms	ATG7; Autophagy Related 7; Ubiquitin-Activating Enzyme E1-Like Protein; Ubiquitin-Like Modifier-Activating Enzyme ATG7; ATG12-Activating Enzyme E1 ATG7; APG7L; HAGP7; ATG7 Autophagy Related 7 Homolog (S. Cerevisiae); APG7 Autophagy 7-Like (S. Cerevisiae); Autophagy-Related Protein 7; APG7 Autophagy 7-Like; APG7-LIKE; APG7-Like; GSA7.
Calculated MW	Calculated MW: 78 kDa, Observed MW: 70 kDa
Uniprot ID	O95352
Gene ID	10533
Background	The molecular machinery of autophagy was largely discovered in yeast and referred to as autophagy-related (Atg) genes. Formation of the autophagosome involves a ubiquitin-like conjugation system in which Atg12 is covalently bound to Atg5 and targeted to autophagosome vesicles. This conjugation reaction is mediated by the ubiquitin E1-like enzyme Atg7 and the E2-like enzyme Atg10.

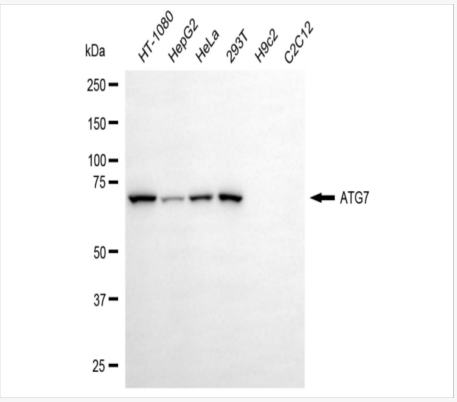
Validation Images



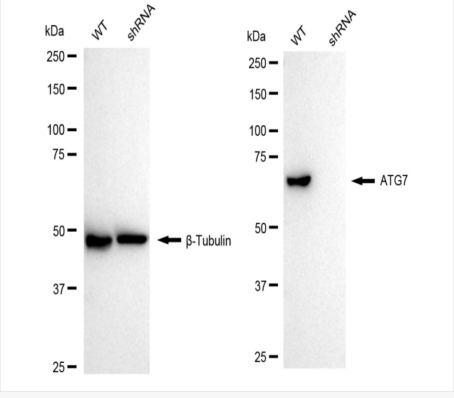
Flow cytometric analysis of ATG7 expression in HepG2 cells using ATG7 antibody (R021868, 1:2,000). Green, isotype control; red, ATG7.



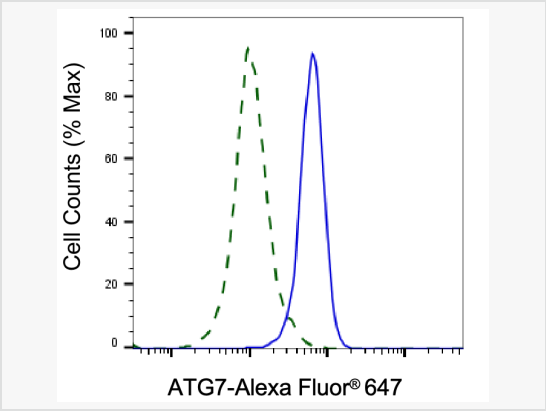
Immunocytochemical staining of HT-1080 cells with ATG7 antibody (R021868, 1:1,000). Nuclei were stained blue with DAPI; ATG7 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Western blotting analysis using ATG7 antibody (R021868). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATG7 antibody (R021868, 1:50,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using ATG7 antibody (R021868). ATG7 expression in wild type (WT) and ATG7 shRNA knockdown (KD) 293T cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ATG7 antibody (R021868, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of ATG7 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) 293T cells were stained with ATG7 antibody (R021868, 1:2,000) and analyzed using BD flow cytometer.