

## [KD Validated] Anti-ATG7 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

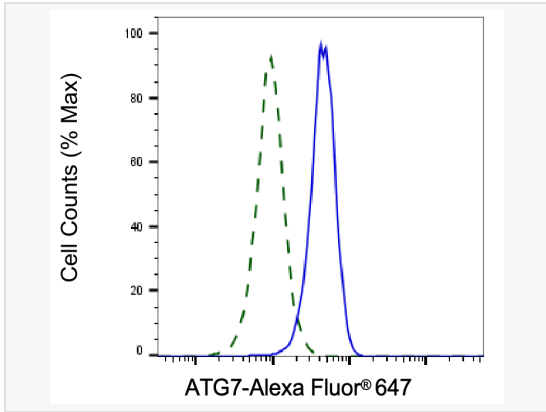
Catalog # R021841

### Product Information

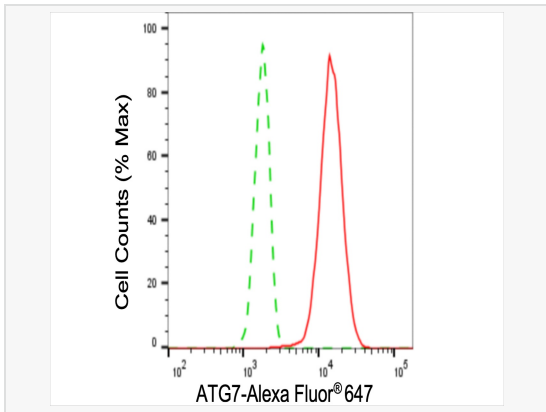
Application	WB, FC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	68D13H15
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Atg7 (Apg7)
Format	Affinity purified monoclonal antibody supplied in PBS 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 [68D13H15] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

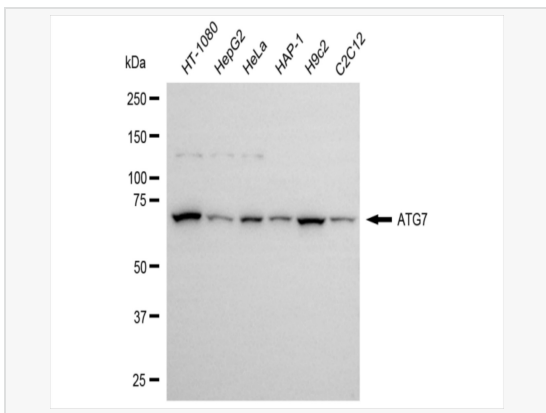
Synonyms	ATG7; Autophagy Related 7; Ubiquitin-Activating Enzyme E1-Like Protein; Ubiquitin-Like Modifier-Activating Enzyme ATG7; ATG12-Activating Enzyme E1 ATG7; APG7L; HAGP7; ATG7 Autophagy Related 7 Homolog (S. Cerevisiae); APG7 Autophagy 7-Like (S. Cerevisiae); Autophagy-Related Protein 7; APG7 Autophagy 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.



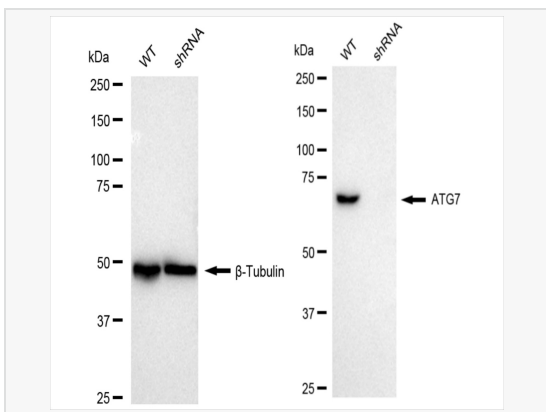
Validation of ATG7 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) 293T cells were stained with ATG7 antibody (R021841, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ATG7 expression in HT-1080 cells using ATG7 antibody (R021841, 1:2,000). Green, isotype control; red, ATG7.



Western blotting analysis using ATG7 antibody (R021841). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATG7 antibody (R021841, 1:5,000) 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 (R021841). ATG7 expression in wild type (WT) and ATG7 shRNA knockdown (KD) 293T cells with 20  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with ATG7 antibody (R021841, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.