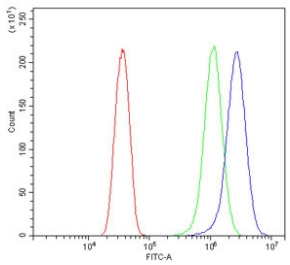
# ATG7 Antibody / APG7 (R31385)

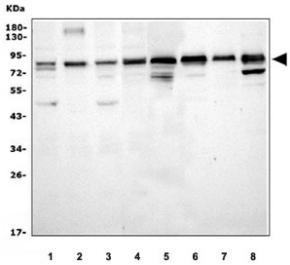
| Catalog No. | Formulation | Size |
|---|---|---|
| R31385 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | O95352 |
| **Applications** | Western Blot : 0.5-1ug/ml<br>Flow Cytometry : 1-3ug/million cells |
| **Limitations** | This ATG7 antibody is available for research use only. |




Flow cytometry testing of human HeLa cells with ATG7 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ATG7 antibody.




Western blot testing of 1) human HeLa, 2) human HepG2, 3) human K562, 4) human Jurkat, 5) rat kidney, 6) mouse kidney, 7) mouse spleen and 8) mouse SP2/0 cell lysate with ATG7 antibody. Predicted molecular weight: 70-80 kDa.

## Description

Autophagy-related protein 7 is a protein that in humans is encoded by the ATG7 gene. This gene was identified based on homology to Pichia pastoris GSA7 and Saccharomyces cerevisiae APG7. In the yeast, the protein appears to be required for fusion of peroxisomal and vacuolar membranes. The protein also shows homology to the ATP-binding and catalytic sites of the E1 ubiquitin activating enzymes. ATG7 is essential for the Apg12 conjugation system that mediates membrane fusion in autophagy. It is found that when nutrients are limited, the protein can regulate p53-dependent cell cycle and cell death pathways.

## Application Notes

Titration of the ATG7 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

Amino acids 652-669 (KVLDQYEREGFNFLAKVF-human) were used as the immunogen for this ATG7 antibody.

## Storage

After reconstitution, the ATG7 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.