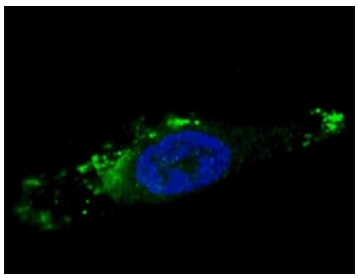
# ATG12 Antibody (F46258)

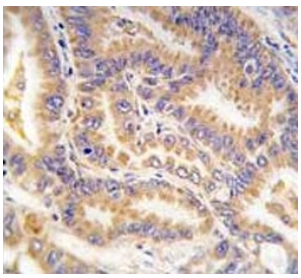
| Catalog No. | Formulation | Size |
|---|---|---|
| F46258-0.4ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml |
| F46258-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Purified |
| **UniProt** | O94817 |
| **Applications** | Immunofluorescence : 1:200<br>Western Blot : 1:1000<br>IHC (Paraffin) : 1:50-1:100 |
| **Limitations** | This ATG12 antibody is available for research use only. |



Fluorescent image of chloroquine-treated U251 cells stained with ATG12 antibody. Alexa Fluor 488 conjugated secondary was used. ATG12 immunoreactivity is localized to autophagic vacuoles in the cytoplasm.



IHC analysis of FFPE human lung carcinoma tissue stained with ATG12 antibody

## Description

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). APG12L/ATG12 is the human homolog of yeast APG12, a ubiquitin-activating enzyme E1-like protein essential for the conjugation system that mediates membrane fusion in autophagy.

## Application Notes

Titration of the ATG12 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 1-30 from the human protein was used as the immunogen for this ATG12 antibody.

## Storage

Aliquot the ATG12 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.