

**Rabbit Anti-ATG12/APG12L Polyclonal: RC0420-0.1ML**

**Intended Use:** For Research Use Only

**Description:** Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents. Autophagy is generally activated by conditions of nutrient deprivation but has also been associated with a number of physiological processes including development, differentiation, neurodegeneration, infection, and cancer. The autophagy protein 12 (ATG12), in combination with autophagy protein 5 (ATG5), functions as an E1-like activating enzyme in a ubiquitin-like conjugating system. The encoded protein is involved in several cellular processes, including autophagic vesicle formation, mitochondrial quality control after oxidative damage, negative regulation of the innate antiviral immune response, lymphocyte development and proliferation, MHC II antigen presentation, adipocyte differentiation, and apoptosis. This conjugation reaction is mediated by the ubiquitin E1-like enzyme ATG7 and the E2-like enzyme ATG10.

**Specifications:**

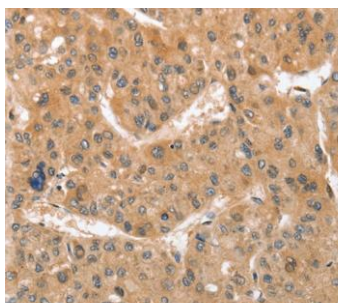
Clone: Polyclonal  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat  
 Immunogen: Recombinant protein of human ATG12  
 Localization: Cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA  
 Package:

Description	Catalog No.	Size
ATG12/APG12L Polyclonal Concentrated	RC0420-0.1ML	0.1 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast cancer, liver cancer, gastric cancer, lung cancer  
 Concentrated Dilution: 25-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
 Incubation Time and Temp: Overnight at 4°C  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human liver cancer stained with anti-ATG12 using DAB

**References:**

1. Enhancement of cisplatin sensitivity in human breast cancer MCF-7 cell line through BiP and 14-3-3? co-knockdown. Kashkoulinejad-Kouhi T, et al. Oncol Rep 45:665-679, 2021.
2. Autophagy and signaling: their role in cell survival and cell death. P Codogno, et al. Cell Death Differ. Nov:12 Suppl 2:1509-18, 2005.