

## Atg12 Polyclonal Antibody

### ORDERING INFORMATION

**Catalog No.** 23006      **Size** 100ug

**Format:** Peptide affinity-purified antibody in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide.

**Concentration:** 1mg/ml

### BACKGROUND

Autophagy is a catabolic process that results in the degradation of bulk cytoplasmic contents within autophagosomes and lysosomes. Atg12 is an ubiquitin-like protein involved in autophagy vesicle formation. Conjugation with Atg5 through a ubiquitin-like conjugating system involving also Atg7 as an E1-like activating enzyme and Atg10 as an E2-like conjugating enzyme, is essential for its function. The Atg12-Atg5 conjugate acts as an E3-like enzyme which is required for lipidation of Atg8 family proteins and their association to vesicle membranes. The Atg12-Atg5 conjugate also negatively regulates the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS.

### SPECIFICATION SUMMARY

**Antigen:** Synthetic peptide corresponding to amino acids at the N-terminus of human Atg12.

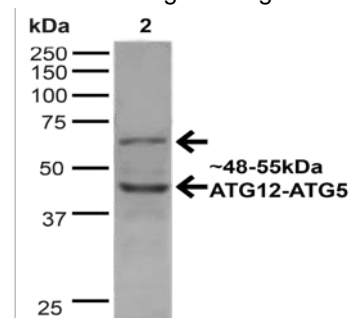
**Accession no.** NP\_001264712.1      **Gene ID** 9140      **SwissProt** O94817

**Host Species:** Rabbit

**Specificity:** This antibody recognizes human Atg12.

### APPLICATIONS

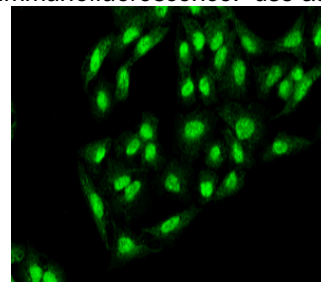
**Immunoblotting:** use at 1-2ug/ml. Bands of ~48-55kDa, corresponding to Atg12-Atg5 complex, are detected. Note: the predicted molecular weight of Atg12 is ~15kDa.



Detection of Atg5-Atg12 in 20ug of HeLa cell lysate.

These are recommended concentrations. Endusers should determine optimal concentrations for their applications.

**Immunofluorescence:** use at 10ug/ml.



Detection of Atg12 in formaldehyde-fixed HeLa cells.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

*For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.*