

Atg12 Polyclonal Antibody

ORDERING INFORMATION

Catalog No. 23007 **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 C-terminus of human Atg12.

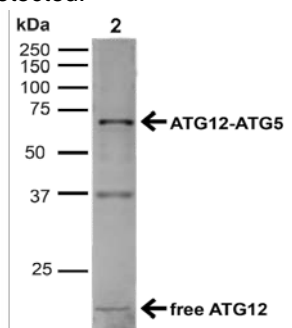
Accession no. NP_001264712.1 **Gene ID** 9140 **SwissProt** O94817

Host Species: Rabbit

Specificity: This antibody recognizes human Atg12.

APPLICATIONS

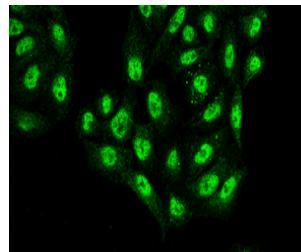
Immunoblotting: use at 1-2ug/ml. Bands of ~55kDa, corresponding to Atg12-Atg5 complex, and ~15kda, corresponding to free Atg12, are detected.



Detection of Atg12 and 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.