

ATG12 Rabbit mAb

Catalog # AP75089

Product Information

| | |
|--------------------------|------------------------|
| Application | WB, IHC-P |
| Primary Accession | O94817 |
| Reactivity | Rat, Human, Mouse |
| Host | Rabbit |
| Clonality | Monoclonal Antibody |
| Isotype | IgG |
| Conjugate | Unconjugated |
| Purification | Affinity Purified |
| Calculated MW | 15113 |

Additional Information

| | |
|--------------------|---|
| Gene ID | 9140 |
| Other Names | ATG12 |
| Dilution | WB~~1:1000-1:5000 IHC-P~~N/A |
| Format | Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA. |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

Protein Information

| | |
|--------------------------|---|
| Name | ATG12 (HGNC:588) |
| Synonyms | APG12, APG12L |
| Function | Ubiquitin-like protein involved in autophagy vesicles 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 the vesicle membranes. As part of the ATG8 conjugation system with ATG5 and ATG16L1, required for recruitment of LRRK2 to stressed lysosomes and induction of LRRK2 kinase activity in response to lysosomal stress (By similarity). |
| Cellular Location | Cytoplasm. Preautophagosomal structure membrane; Peripheral membrane protein. Note=TECPR1 recruits the ATG12- ATG5 conjugate to the autolysosomal membrane |

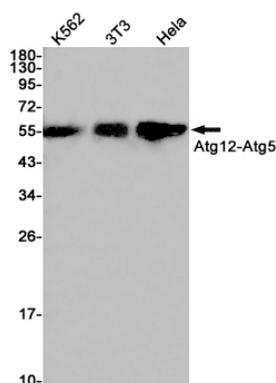
Tissue Location

Ubiquitous..

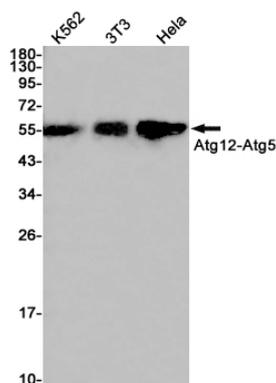
Background

Ubiquitin-like protein involved in autophagy vesicles 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 the vesicle membranes. As part of the ATG8 conjugation system with ATG5 and ATG16L1, required for recruitment of LRRK2 to stressed lysosomes and induction of LRRK2 kinase activity in response to lysosomal stress (By similarity).

Images



Western blot analysis of Apg12 in K562, 3T3, HeLa lysates using ATG12 antibody.



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