

APG12 / ATG12 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS12695**Specification**

APG12 / ATG12 Antibody (Internal) - Product Information

Application	WB, IF, IHC
Primary Accession	O94817
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15kDa KDa

APG12 / ATG12 Antibody (Internal) - Additional Information**Gene ID** 9140**Other Names**

Ubiquitin-like protein ATG12, Autophagy-related protein 12, APG12-like, ATG12, APG12, APG12L

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

APG12 / ATG12 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

APG12 / ATG12 Antibody (Internal) - 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.

Cellular Location

Cytoplasm. Preautophagosomal structure membrane; Peripheral membrane protein. Note=TECPR1 recruits the ATG12- ATG5 conjugate to the autolysosomal membrane

Tissue Location

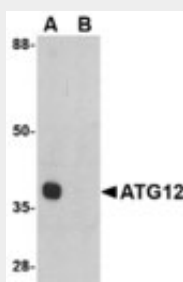
Ubiquitous..

APG12 / ATG12 Antibody (Internal) - Protocols

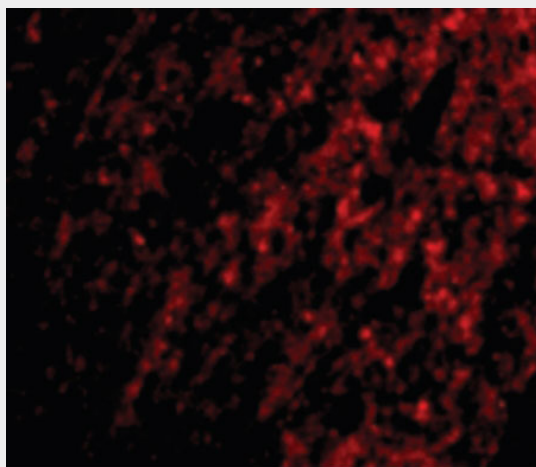
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

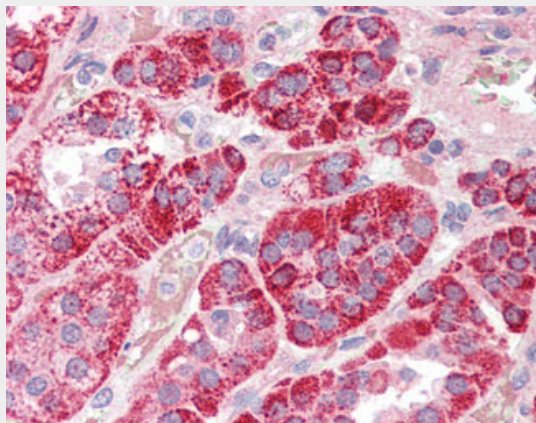
APG12 / ATG12 Antibody (Internal) - Images



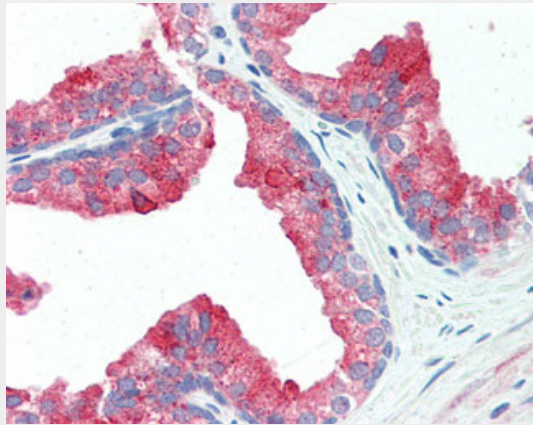
Western blot of ATG12 in mouse heart tissue lysate with ATG12 antibody at 1 ug/ml in (A) the...



Immunofluorescence of ATG12 in Human Brain cells with ATG12 antibody at 20 ug/ml.



Anti-ATG12 antibody IHC of human adrenal.



Anti-ATG12 antibody IHC of human prostate.

APG12 / ATG12 Antibody (Internal) - 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. The ATG12-ATG5 conjugate also regulates negatively the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Plays also a role in translation or delivery of incoming viral RNA to the translation apparatus.

APG12 / ATG12 Antibody (Internal) - References

Mizushima N., et al. J. Biol. Chem. 273:33889-33892(1998).
Schmutz J., et al. Nature 431:268-274(2004).
Tanida I., et al. J. Biol. Chem. 276:1701-1706(2001).
Tanida I., et al. Biochem. Biophys. Res. Commun. 296:1164-1170(2002).
Tanida I., et al. J. Biol. Chem. 277:13739-13744(2002).