

ATG7 antibody

Catalog No: #38148



Package Size: #38148-1 50ul #38148-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

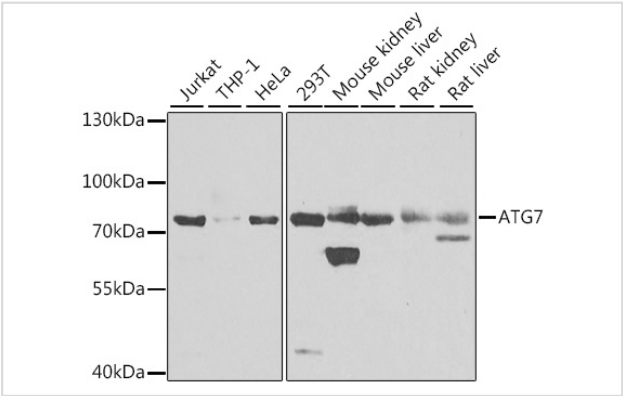
Description

Product Name	ATG7 antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of total ATG7 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human ATG7.
Conjugates	Unconjugated
Target Name	ATG7
Other Names	ATG7;APG7-LIKE;APG7L;DKFZp434N0735;GSA7;
Accession No.	Swiss-Prot#: O95352NCBI Gene ID: 10533
SDS-PAGE MW	78kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

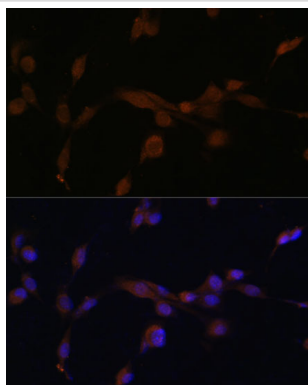
Application Details

WB 1:500 - 1:2000IHC 1:50 - 1:200IF 1:50 - 1:200

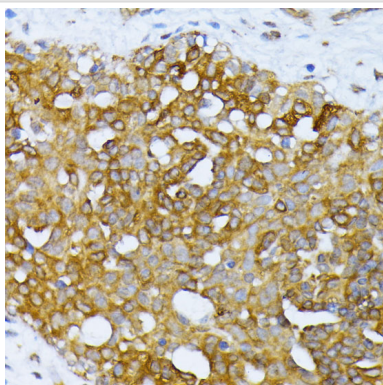
Images



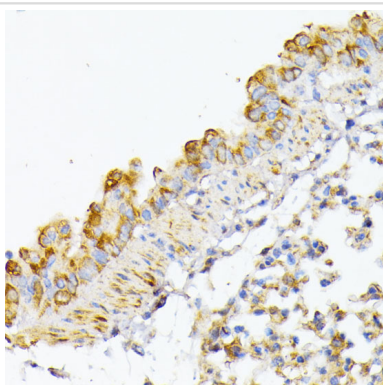
Western blot analysis of extracts of various cell lines, using ATG7 antibody at 1:1000 dilution.



Immunofluorescence analysis of NIH/3T3 cells using ATG7 antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunohistochemistry of paraffin-embedded human breast cancer using ATG7 antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse lung using ATG7 antibody at dilution of 1:100 (40x lens).

Background

Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents (1,2). 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 (3). The molecular machinery of autophagy was largely discovered in yeast and referred to as autophagy-related (Atg) genes. Formation of the autophagosome involves a ubiquitin-like conjugation system in which Atg12 is covalently bound to Atg5 and targeted to autophagosome vesicles (4-6). This conjugation reaction is mediated by the ubiquitin E1-like enzyme Atg7 and the E2-like enzyme Atg10 (7,8).

Published Papers

el at., Autophagy regulates the degeneration of the auditory cortex through the AMPK-mTOR-ULK1 signaling pathway. In Int J Mol Med. On 2018 Apr by Yuan J, Zhao X et al.. PMID: 29344647, , (2018)

[PMID:29344647](#)

el at., Dexmedetomidine Mitigated NLRP3-Mediated Neuroinflammation via the Ubiquitin-Autophagy Pathway to Improve Perioperative Neurocognitive Disorder in Mice. In Front Pharmacol on 2021 May 17 by Lieliang Zhang, Fan Xiao, et al.. PMID: 34079457, , (2021)

[PMID:34079457](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.