

ATG7 antibody

Catalog No: #38148

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



Signalway Antibody

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

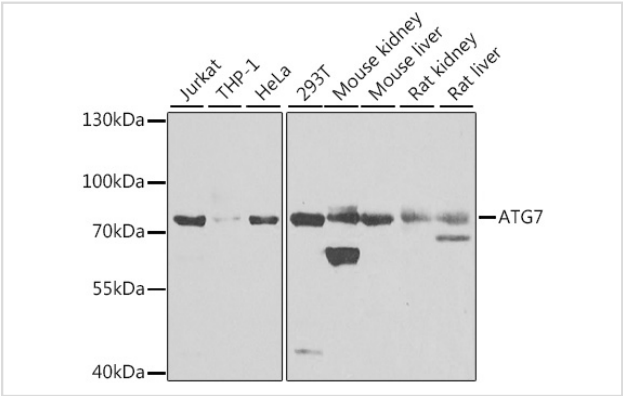
Description

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

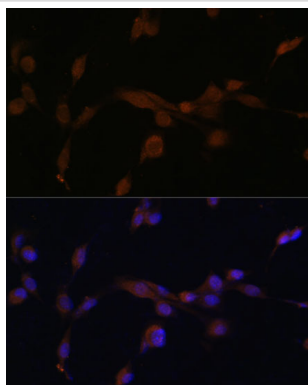
Application Details

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

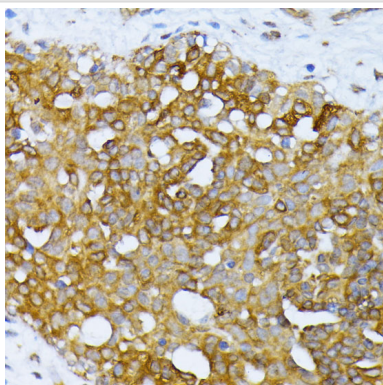
Images



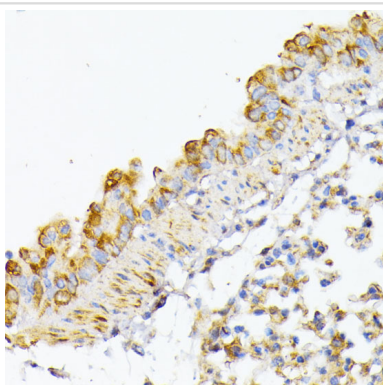
Western blot analysis of extracts of various cell lines, using ATG7 at 1:1000 dilution.



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



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



Immunohistochemistry of paraffin-embedded mouse lung using ATG7 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.