For Research Use Only

ATG5 Polyclonal antibody

Catalog Number:10181-2-AP Featured Product 272 Publications

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Basic Information

Catalog Number:
10181-2-AP

Size:
650 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0214

GenBank Accession Number:
BC002699

GeneID (NCBI):
9474

UNIPROT ID:
Q9H1Y0

Full Name:
ATG5 autophagy related 5 homolog (S. cerevisiae)

Calculated MW:
32 kDa

Observed MW:
32 kDa, 40-45 kDa, 50-55 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:5000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
FC, IHC, IP, WB, ELISA

Cited Applications:
WB, IF, FC, IHC

Species Specificity:
human, mouse, rat

Cited Species:
human, goat, chicken, rat, mouse, monkey, hamster, pig, bovine, grouper

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : A549 cells, HeLa cells, mouse kidney tissue, HepG2 cells

IP : HeLa cells,

IHC : human colon cancer tissue, human gliomas tissue

Background Information

ATG5, also named as APG5L and ASP, belongs to the ATG5 family. It is required for autophagy. It plays an important role in the apoptotic process, possibly within the modified cytoskeleton. Its expression is a relatively late event in the apoptotic process, occurring downstream of caspase activity. Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents. Formation of the autophagosome involves a ubiquitin-like conjugation system in which Atg12 is covalently bound to Atg5 and targeted to autophagosome vesicles. It mediates autophagosome-independent host protection. This antibody is raised against 28-275 amino acids of human ATG5. It can recognize the ATG5-ATG12 complex (55 kDa) which can be truncated and generate a 40-45 kDa band. 10181-2-AP also recognizes the free ATG5 (32 kDa).

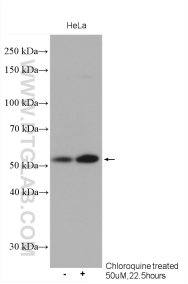
Notable Publications

Author	Pubmed ID	Journal	Application
Zeen Zhu	36248959	Front Oncol	WB
Samana Batool	30274346	Int J Mol Sci	WB
Jiawei Hao	36126167	Autophagy	WB

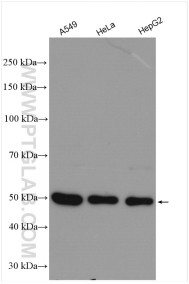
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

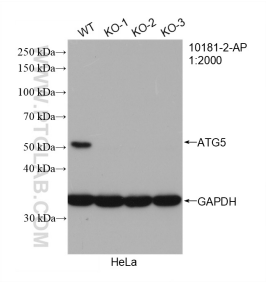
Selected Validation Data



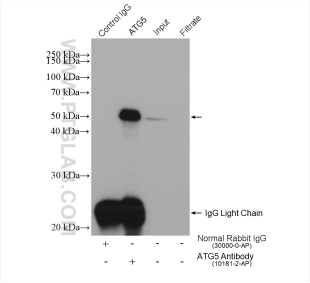
HeLa cells were subjected to SDS PAGE followed by western blot with 10181-2-AP (ATG5 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



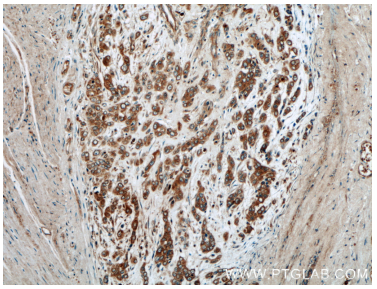
Various lysates were subjected to SDS PAGE followed by western blot with 10181-2-AP (ATG5 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



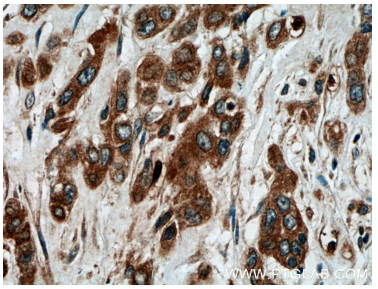
WB result of ATG5 antibody (10181-2-AP; 1:2000; room temperature for 1.5 hours) with wild-type and ATG5 knockout HeLa cells.



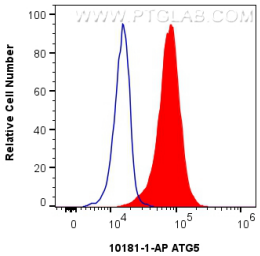
IP result of anti-ATG5 (IP:10181-2-AP, 4ug; Detection:10181-2-AP 1:3000) with HeLa cells lysate 1760 ug.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10181-2-AP (ATG5 antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10181-2-AP (ATG5 antibody) at dilution of 1:200 (under 40x lens).



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human ATG5 (10181-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP, Clone:) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).