

For Research Use Only

# ATG5 Monoclonal antibody

Catalog Number: 66744-1-Ig

Featured Product

43 Publications



## Basic Information

Catalog Number:

66744-1-Ig

Size:

150ul, Concentration: 1500 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG16685

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:

50-55 and 40-45 kDa

Purification Method:

Protein A purification

CloneNo.:

2D3B8

Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:150-1:600

## Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig

**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 : HEK-293 cells, HepG2 cells, HeLa cells, Jurkat cells, Raji cells, HSC-T6 cells, NIH/3T3 cells

IHC : human colon cancer 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. 66744-1-Ig antibody can recognize the ATG5-ATG12 complex (50-55 kDa) which can be truncated and generate a 40-45 kDa band. (PMID: 19783656, 25032862)

## Notable Publications

Author	Pubmed ID	Journal	Application
Wenbin Pei	34650433	Front Pharmacol	WB
Zixuan Liu	33017703	Chemosphere	WB
Zixuan Liu	32937103	Toxicol Appl Pharmacol	WB

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

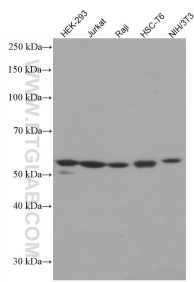
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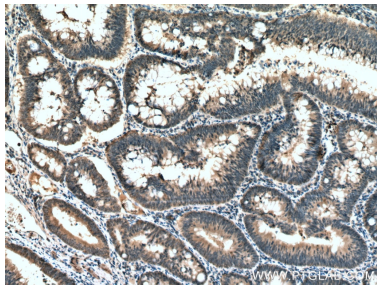
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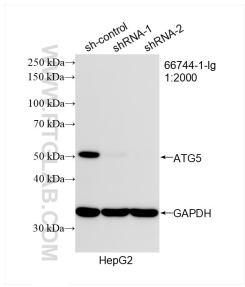
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66744-1-Ig (ATG5 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66744-1-Ig (ATG5 antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of ATG5 antibody (66744-1-Ig; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATG5 transfected HepG2 cells.