For Research Use Only

ATG5 Monoclonal antibody

Catalog Number: 66744-1-lg Featured Product 52 Publications



Basic Information

Catalog Number: 66744-1-lg Source:

Isotype: IgG2a

Mouse

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:**

2D3B8

Protein A purification CloneNo.:

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-lg 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.

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

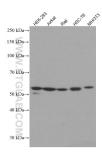
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

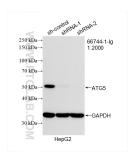
Selected Validation Data



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



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 66744-1-1g (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-lg; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATG5 transfected HepG2 cells.