ATG5
Polyclonal ANTIBODY

Catalog Number: 10181-2-AP

**Basic Information**

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>10181-2-AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenBank Accession Number:</td>
<td>BC003859</td>
</tr>
<tr>
<td>GeneID (NCBI):</td>
<td>9474</td>
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<tr>
<td>Source:</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Isotype:</td>
<td>IgG</td>
</tr>
<tr>
<td>Puriﬁcation Method:</td>
<td>Antigen afﬁnity puriﬁcation</td>
</tr>
<tr>
<td>Immunogen Catalog Number:</td>
<td>A00214</td>
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</tbody>
</table>

- **Size:** 40 μg/150 μl
- **Recommended Dilutions:**
  - WB: 1:500-1:1000
  - IHC: 1:50-1:500
  - IF: 1:20-1:200

**Applications**

- **Tested Applications:** IF, IHC, WB, ELISA
- **Cited Applications:** FC, IF, IHC, WB
- **Species Speciﬁcity:** human, mouse, rat
- **Cited Species:** human, monkey, mouse, rat

**Background Information**

ATG5, also named as ATG5L 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 autophagosomes-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**

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samana Batool</td>
<td>30274346</td>
<td>Int J Mol Sci</td>
<td>WB</td>
</tr>
<tr>
<td>Jianhai Zhang</td>
<td>28927274</td>
<td>J Agric Food Chem</td>
<td>WB</td>
</tr>
<tr>
<td>Miao Wang</td>
<td>29163781</td>
<td>Oncotarget</td>
<td>WB</td>
</tr>
</tbody>
</table>

**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBST with 0.1% sodium azide and 50% glycerol; pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

WB result of ATG5 antibody (10181-2-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATG5 transfected HepG2 cells.

SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 10181-2-AP (ATG5 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

IF result of anti-ATG5 (10181-2-AP) with E15 mouse cortical neurons.

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

Mouse kidney tissue were subjected to SDS PAGE followed by western blot with 10181-2-AP (ATG5 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.

IF result of anti-ATG5 (10181-2-AP) with E15 mouse cortical neurons.

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