

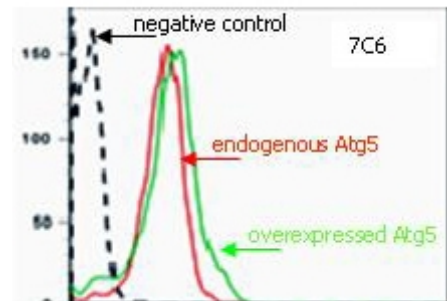
AM20205PU-N**Monoclonal Antibody to APG5L / ATG5 (incl. pos. control) - Purified**

Alternate names:	APG5-like, ASP, Apoptosis-specific protein, Autophagy protein 5
Quantity:	0.1 mg
Background:	Autophagy as a response to cellular stress and starvation is an alternative process of proteasomal degradation for some long-lived proteins and organelles. Alterations in the autophagic-lysosomal compartment have been linked to neuronal death in many neurodegenerative disorders as well as in transmissible neuronal pathologies (prion diseases). The gene product of autophagy-related gene 5 (ATG5) is required for autophagosome-formation. ATG5 also enhances the susceptibility towards apoptotic stimuli. Like Bcl-2, ATG5 exhibits a dual function by modulating both autophagy and apoptosis.
Uniprot ID:	Q9H1Y0
NCBI:	NP_004840
GeneID:	9474
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
Clone:	7C6
Immunogen:	Recombinant ATG5
Format:	State: Lyophilized purified IgG fraction Purification: Purified from Serum-Free Cell Culture Supernatant by subsequent ultrafiltration and Size Exclusion Chromatography Buffer System: PBS Preservatives: 0.09% Sodium Azide Stabilizers: PEG and Sucrose Reconstitution: Restore with 1ml H ₂ O (15 min, RT).
Applications:	Flow Cytometry. Immunoblotting (Western Blot): 0.5 µg/ml for HRPO/ECL detection. Recommended blocking buffer: Casein/Tween 20 based blocking buffer and blot incubation buffer. Immunocytochemistry: 0.5 µg/ml. <i>Included Postitive Control:</i> Cell lysate from untreated SH-SY5Y cells (See Protocols). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	24, 33, 55 kDa

- Specificity:** Recognizes the ATG5-ATG12 protein complex at 55 kDa and ATG5 at 33 kDa in Immunoblot application.
Species: Human, Mouse, Rat and Canine.
 Other species not tested.
- Storage:** Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze in liquid nitrogen) at -20°C to -80°C.
 Avoid repeated freezing and thawing.
 Thaw aliquots at 37°C. Thawed aliquots may be stored at 2-8°C up to 3 months.
 Shelf life: one year from despatch.
- Protocols:** **Positive Control:** Cell lysate from untreated SH-SY5Y cells.
- Formulation:** Lyophilized cell lysate from Serum starved SH-SY5Y cells.
- Reconstitution:** Restore by addition of 200 µl H₂O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.
- Application:** The Positive Control lysate is recommended for Immunoblot applications. 20µl of Positive Control correspond to ca. 20.000 cells.
 Use 20µl/lane (mini gel) for HRPO/ECL detection of the target proteins.
- Storage:** Aliquote and store frozen.
 Avoid repeated freeze/thaw cycles.
 Shelf life: one year from despatch.

The Lyophilized cell lysates contain SDS and are **not recommended** for applications with native proteins such as Immunoprecipitation.

- Pictures:** **Immunofluorescence staining and Analysis by Flow Cytometry:** AM20205PU-N ATG5 antibody detects the endogenous Atg5 as well as the overexpressed 33 kDa protein in Jurkat cells.



Monoclonal antibody ATG5-7C6 detects the endogenous Atg5 as well as the overexpressed 33 kDa-protein in Jurkat cells. Cells were fixed with 4% paraformaldehyd for 5 min and permeabilized with 0.05% Saponin. After 10 min aceton-treatment, Atg5 was detected with mab ATG5-7C6 at 0.5 $\mu\text{g/ml}$. *Images by courtesy of Hans-Uwe Simon, MD, PhD, University of Bern.*

