

AM20206PU-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:	11C3
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:	Immunoblotting (Western Blot): 0.5 µg/ml for HRPO/ECL detection. Recommended blocking buffer: Casein/Tween 20 based blocking buffer and blot incubation buffer. Included Positive Control: Cell lysate from untreated SH-SY5Y cells (See Protocols for more details). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Recognizes the ATG5-ATG12 protein complex at 55 kDa in immunoblot application.
Species Reactivity:	Tested: Human, mouse, rat, dog.
Add. Information:	Molecular Weight: 24, 33, 55 kDa

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.
Stability: Reconstitute 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: Whole lysate of serum starved SH-SY5Y cells was applied to SDS-PAGE and transferred to a PVDF membrane. The Immunoblot was probed with the indicated monoclonal antibodies at 0.5 µg/ml for 1h at 15-22°C and developed with ECL (exposure time: 30 sec). Lane M: Molecular Weight marker Lane 1: AM20205PU-N (Clone 7C6) Lane 2: AM20206PU-N (Clone 11C3)

