

### 36-3593: Anti-ATG5 (Autophagy Marker) Monoclonal Antibody(Clone: ATG5/2101)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ATG5/2101
<b>Application :</b>	ELISA, WB, IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	ATG5
<b>Gene ID :</b>	9474
<b>Uniprot ID :</b>	Q9H1Y0
<b>Alternative Name :</b>	Autophagy protein 5 (APG5); APG5 autophagy 5 like (APG5L); Apoptosis-specific protein (ASP); ATG5; Autophagy related 5; hAPG5
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Recombinant fragment of human ATG5 protein (around aa 1-119) (exact sequence is proprietary)

#### Description

The protein encoded by this gene, in combination with autophagy protein 12, functions as an E1-like activating enzyme in a ubiquitin-like conjugating system. The encoded protein is involved in several cellular processes, including autophagic vesicle formation, mitochondrial quality control after oxidative damage, negative regulation of the innate antiviral immune response, lymphocyte development and proliferation, MHC II antigen presentation, adipocyte differentiation, and apoptosis. The ATG5 protein is essential for autophagy; a process that is usually beneficial for cells to self-degrade their own components when they are no longer useful.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

#### Application Note

ELISA (For coating use Ab at 1-5µg/ml, order Ab without BSA); Western Blot (1-2µg/ml); Immunohistochemistry (Formalin-fixed) (1-2µg/ml for 30 min at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes);

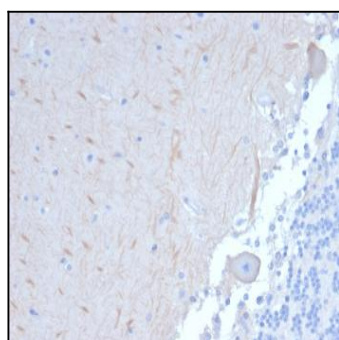


Fig. 1: Formalin-fixed, paraffin-embedded human Brain stained with ATG5 Mouse Monoclonal Antibody (ATG5/2101).

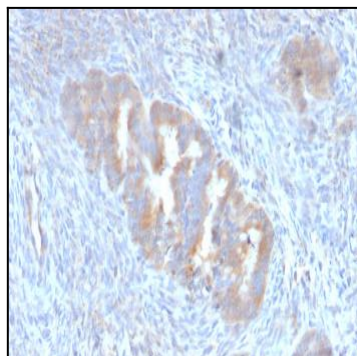


Fig. 2: Formalin-fixed, paraffin-embedded human Endometrium stained with ATG5 Mouse Monoclonal Antibody (ATG5/2101).

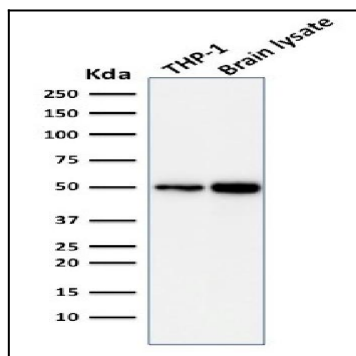


Fig. 3: Western Blot Analysis of THP-1 cell and human Brain tissue lysate using ATG5 Mouse Monoclonal Antibody (ATG5/2101).

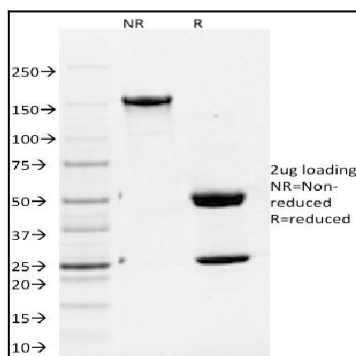


Fig. 4: SDS-PAGE Analysis Purified ATG5 Mouse Monoclonal Antibody (ATG5/2101). Confirmation of Integrity and Purity of Antibody.

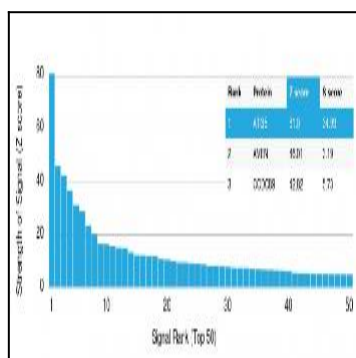


Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using ATG5 Mouse Monoclonal Antibody (ATG5/2101). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.