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PRODUCT DATASHEET

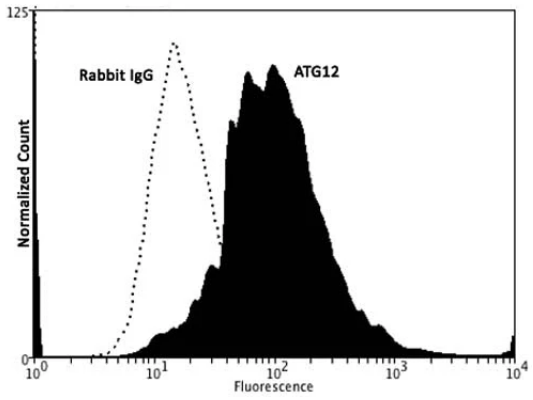
Anti-Autophagy-related protein 12 (ATG12) Antibody

Product Details

Available Variants	500 µg (SKU:R-137-500)
Conjugate	Unconjugated
Isotype	IgG
Host Species	Rabbit
Format	IgG
Physical State	Lyophilized
Production Notes	Protein G purified IgG
Applications	IHC, WB
Dilution Ranges	WB: 1-5 µg/mL
Species Reactivity	Human, Rat
Immunogen	A synthetic peptide corresponding to the N-terminal of human ATG12 protein has been used as the immunogen. No immunogenic carrier protein was conjugated to the immunogen. Instead, Adjukine B (see the Adjuvants in biosensis' product list) has been used to orchestrate/boost the immune response.
Specificity	IHC and WB confirmed the specificity for ATG12. Human, rat.
Storage	Spin vial briefly before opening. Reconstitute with 500 µL of sterile-filtered, ultra pure water. Centrifuge to remove any insoluble material. After reconstitution keep aliquots at -20°C for a higher stability, and at 2-8°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
UniProt ID	O94817 UniProt Summary: Ubiquitin-like protein involved in autophagy vesicles formation. Conjugation with ATG5 through a ubiquitin-like conjugating system involving also ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate

	acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. As part of the ATG8 conjugation system with ATG5 and ATG16L1, required for recruitment of LRRK2 to stressed lysosomes and induction of LRRK2 kinase activity in response to lysosomal stress.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	9140

Product Images



Fixing and Permeabilization of cells: Absolute methanol (10 minutes in ice) and 0.1% Tween-20 in PBS, Blocking: 15% Horse serum, Primary antibody: Rabbit Polyclonal antibody to ATG12 (cat # R-137-500, 2µg per ~10^6 cells) for 30 minutes at room temperature, Secondary antibody: Donkey anti-rabbit PE labeled secondary antibody (1:100 fold dilution) with incubation for 20 minutes in dark at room temperature. Normal Rabbit Polyclonal IgG was used as negative control under same conditions (black dashed). Flow cytometry data and results were generated using Orflo MoxiflowTM instrument and protocols. The data demonstrates specific staining of ATG12 expressed in human neuroblastoma SH-SY5Y cell line using cat # R-137-500.