

Mouse Anti-ATG5/APG5L [MD319]: MC0628, MC0628RTU7

Intended Use: For Research Use Only

Description: Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents. Autophagy is generally activated by conditions of nutrient deprivation but has also been associated with a number of physiological processes including development, differentiation, neurodegeneration, infection, and cancer. The autophagy protein 5 (ATG5), in combination with autophagy protein 12 (ATG12), 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. This conjugation reaction is mediated by the ubiquitin E1-like enzyme ATG7 and the E2-like enzyme ATG10.

Specifications:

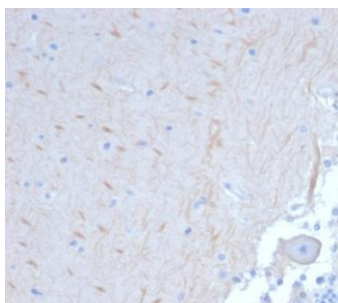
Clone: MD319
 Source: Mouse
 Isotype: IgG1
 Reactivity: Human
 Immunogen: Recombinant fragment of human ATG5 protein aa 1-119
 Localization: Cytoplasm, preautophagosomal structure membrane
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, WB
 Package:

Description	Catalog No.	Size
ATG5/APG5L [MD319] Concentrated	MC0628	1 ml
ATG5/APG5L [MD319] Prediluted	MC0628RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Colon or duodenum, brain, endometrium, ovary, PANC-1, Raji or HeLa cells
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes at RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human brain stained with anti-ATG5 using DAB

References:

1. Enhancement of cisplatin sensitivity in human breast cancer MCF-7 cell line through BiP and 14-3-3? co-knockdown. Kashkoulinejad-Kouhi T, et al. Oncol Rep 45:665-679, 2021.
2. Autophagy and signaling: their role in cell survival and cell death. P Codogno, et al. Cell Death Differ. Nov:12 Suppl 2:1509-18, 2005.