

**Mouse Anti-ATP6V1C1/V-ATPase C1 [G5]: MC0149, MC0149RTU7**

**Intended Use:** For Research Use Only

**Description:** This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of intracellular compartments of eukaryotic cells. Vacuolar-type H<sup>+</sup>-ATPase (V-ATPase) is a multisubunit enzyme responsible for acidification of eukaryotic intracellular organelles. V-ATPases pump protons against an electrochemical gradient, while F-ATPases reverse the process, thereby synthesizing ATP. A peripheral V1 domain, which is responsible for ATP hydrolysis, and an integral V0 domain, which is responsible for proton translocation, compose V-ATPase. Nine subunits (A-H) make up the V1 domain and five subunits (a, d, c, c' and c'') make up the V0 domain. Like F-ATPase, V-ATPase most likely operates through a rotary mechanism. Subunit C is necessary for the assembly of the catalytic sector of the enzyme and is likely to have a specific function in its catalytic activity. V-ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells.

**Specifications**

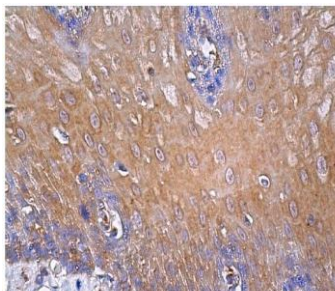
Clone:	G5
Source:	Mouse
Isotype:	IgG2b/k
Reactivity:	Human, mouse, rat
Immunogen:	Human V-ATPase C1 aa 83-382
Localization:	Extracellular matrix
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN <sub>3</sub> )
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, ICC/IF, IP, WB
Package:	

Description	Catalog No.	Size
ATP6V1C1/V-ATPase C1 Concentrated	MC0149	1 ml
ATP6V1C1/V-ATPase C1 Prediluted	MC0149RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue:	Stomach, cerebellum, cerebral cortex, and kidney tissues
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 @ RT
Detection:	Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human esophagus tissue stained with anti-ATP6V1C1 using DAB

**References:**

1. mTORC1 feedback to AKT modulates lysosomal biogenesis through MiT/TFE regulation. Kaushal Asrani, et al. J Clin Invest. Dec 2;129(12):5584-5599, 2019.
2. The IP3 R Binding Protein Released With Inositol 1,4,5-Trisphosphate Is Expressed in Rodent Reproductive Tissue and Spermatozoa Heike Borth, et al. J Cell Physiol. May;231(5):1114-29, 2016.