

**Mouse Anti-CD143/Angiotensin Converting Enzyme 1/ACE [ACE/3765]: MC0559, MC0559RTU7**

**Intended Use:** For Research Use Only

**Description:** This gene encodes an enzyme involved in catalyzing the conversion of angiotensin I into a physiologically active peptide angiotensin II. Angiotensin II is a potent vasopressor and aldosterone-stimulating peptide that controls blood pressure and fluid-electrolyte balance. This enzyme plays a key role in the renin-angiotensin system. Many studies have associated the presence or absence of a 287 bp Alu repeat element in this gene with the levels of circulating enzyme or cardiovascular pathophysiologies. Two most abundant alternatively spliced variants of this gene encode two isozymes - the somatic form and the testicular form that are equally active. Multiple additional alternatively spliced variants have been identified but their full length nature has not been determined.

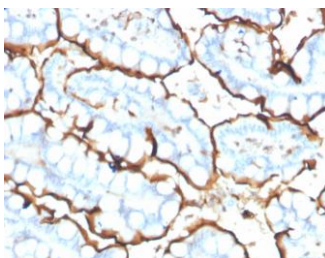
**Specifications:**

Clone: ACE/3765  
Source: Mouse  
Isotype: IgG2b/k  
Reactivity: Human  
Localization: Membrane  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA, WB  
Package:

Description	Catalog No.	Size
CD143/Angiotensin Converting Enzyme 1/ACE Concentrated	MC0559	1 ml
CD143/Angiotensin Converting Enzyme 1/ACE Prediluted	MC0559RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Kidney, gastrointestinal system  
Concentrated Dilution: 50-200  
Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using 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 small intestine stained with anti-CD143 using DAB

**References:**

1. Pathological Ace2-to-Ace enzyme switch in the stressed heart is transcriptionally controlled by the endothelial Brg1-FoxM1 complex. Yang J, et al. Proc Natl Acad Sci U S A 113:E5628-35, 2016.
2. Klotho Ameliorates Kidney Injury and Fibrosis and Normalizes Blood Pressure by Targeting the Renin-Angiotensin System. Zhou L, et al. Am J Pathol 185:3211-23, 2015.
3. Multiple Genes of the Renin-Angiotensin System Are Novel Targets of Wnt/ $\beta$ -Catenin Signaling. Zhou L, et al. J Am Soc Nephrol N/A:N/A, 2014.

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Rev. A