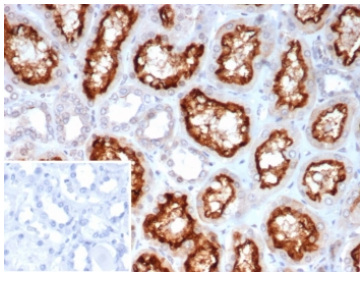
ACE2 Antibody Clone ACE2/7202 / Angiotensin-Converting Enzyme 2 [clone ACE2/7202] (V5785)

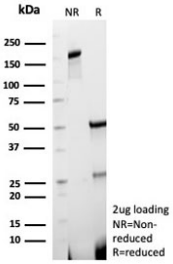
Catalog No.	Formulation	Size
V5785-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5785-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5785SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ACE2/7202
Purity	Protein G affinity
UniProt	Q9BYF1
Localization	Cell membrane, Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This ACE2 antibody is available for research use only.



ACE2 Antibody Clone ACE2/7202 in human kidney tissue. Immunohistochemistry staining of FFPE human kidney demonstrates strong membranous and cytoplasmic staining in renal tubular epithelial cells, consistent with the known epithelial localization of Angiotensin-converting enzyme 2 / ACE2 in kidney tubules. The inset shows PBS used in place of primary antibody as a secondary-only negative control. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 Tris buffer with 1 mM EDTA for 20 min before staining. Brown chromogenic signal marks ACE2-positive tubular epithelial cells while surrounding stromal elements remain largely negative.



SDS-PAGE analysis of purified, BSA-free ACE2 Antibody Clone ACE2/7202 as confirmation of integrity and purity.

Description

Angiotensin-converting enzyme 2 (ACE2) is a membrane-associated metalloprotease encoded by the ACE2 gene that functions as an important regulator of the renin-angiotensin signaling pathway. ACE2 Antibody Clone ACE2/7202 recognizes Angiotensin-Converting Enzyme 2 protein and supports detection of ACE2 expression in cells and tissues in research applications. ACE2, also referred to as ACE2 receptor or Angiotensin-converting enzyme homolog, catalyzes the conversion of angiotensin II to angiotensin-(1-7), a peptide that counterbalances the vasoconstrictive and pro-inflammatory signaling pathways associated with angiotensin II activity.

ACE2 is a type I transmembrane glycoprotein containing a large extracellular catalytic domain and a short intracellular cytoplasmic region. The protein is widely expressed in epithelial tissues including lung, small intestine, kidney, and cardiovascular tissues where it participates in regulation of vascular tone, epithelial barrier function, and peptide signaling networks. Because of its membrane localization and enzymatic activity, ACE2 plays a central role in maintaining physiological balance within the renin-angiotensin pathway.

ACE2 expression is particularly prominent in epithelial cell populations involved in absorption, secretion, and barrier functions. In tissues such as intestine and kidney, ACE2 protein is typically localized to epithelial cell membranes where it participates in peptide processing and receptor-associated signaling pathways. ACE2 has also attracted substantial research interest due to its role as a host receptor involved in viral entry mechanisms for several coronaviruses, making ACE2 expression patterns relevant to studies examining epithelial susceptibility and host-pathogen interactions.

A mouse monoclonal antibody, clone ACE2/7202, recognizes ACE2 protein and enables detection of ACE2 expression in research systems. ACE2 Antibody Clone ACE2/7202 allows investigators to examine ACE2 distribution in cells and tissues and to evaluate differences in receptor expression between experimental conditions. Such studies contribute to a broader understanding of ACE2 biology and its involvement in cardiovascular regulation, epithelial signaling networks, and host-pathogen interactions.

Application Notes

Optimal dilution of the ACE2 Antibody Clone ACE2/7202 should be determined by the researcher.

Immunogen

A portion of amino acids 1-300 from human ACE2 was used as the immunogen for the ACE2 antibody.

Storage

Aliquot the ACE2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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