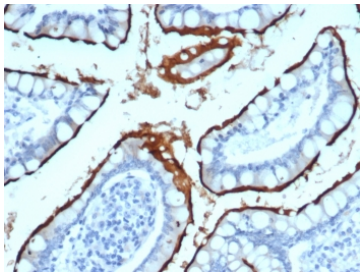
ACE2 Antibody for WB / Angiotensin Converting Enzyme 2 Antibody for Western Blotting [clone ACE2/7203] (V5342)

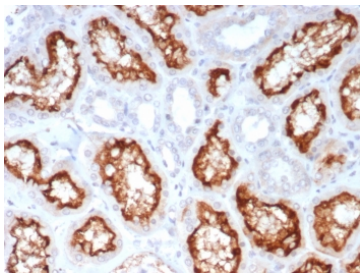
Catalog No.	Formulation	Size
V5342-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5342-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5342SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

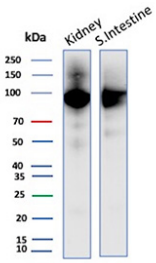
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ACE2/7203
Purity	Protein A/G affinity
UniProt	Q9BYF1
Localization	Cell membrane, Secreted
Applications	ELISA (Order BSA-free format for coating) Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This ACE2 antibody is available for research use only.



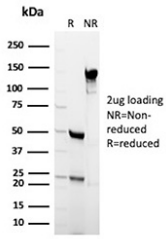
ACE2 Antibody (clone ACE2/7203) with human small intestine tissue. Immunohistochemistry staining of FFPE human small intestine demonstrates membranous and cytoplasmic staining in epithelial cells lining the intestinal villi, consistent with the known epithelial localization of Angiotensin Converting Enzyme 2 / ACE2. The antibody was applied at 2 ug/ml following heat-induced epitope retrieval by boiling tissue sections in pH 9 Tris buffer with 1 mM EDTA for 20 min. Brown chromogenic signal highlights ACE2-positive intestinal epithelial cells while surrounding stromal elements remain largely negative.



IHC staining of FFPE human kidney tissue with ACE2 antibody (clone ACE2/7203) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



ACE2 Antibody for WB (clone ACE2/7203) in human tissue lysates. Western blot analysis of human kidney (Lane 1) and human small intestine (Lane 2) tissue lysates using ACE2 Antibody for WB detects a band at approximately 95-110 kDa, consistent with the predicted molecular weight of Angiotensin Converting Enzyme 2 / ACE2 and its known glycosylated forms. The stronger band observed in small intestine lysate aligns with the known epithelial enrichment of ACE2 in intestinal tissues.



SDS-PAGE Analysis of Purified, BSA-Free ACE2 Antibody (clone ACE2/7203). Confirmation of Integrity and Purity of the Antibody.

Description

Angiotensin-converting enzyme 2 (ACE2) is a membrane-associated metalloprotease encoded by the ACE2 gene that functions as a key regulator of the renin-angiotensin signaling pathway. ACE2 Antibody for WB enables detection of Angiotensin Converting Enzyme 2 protein in cell and tissue lysates using western blotting analysis. 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 that contains 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 ACE2 is a membrane-associated enzyme, biochemical analysis using western blotting provides an important approach for evaluating ACE2 protein expression levels in cellular and tissue samples.

Western blot analysis is commonly used to examine ACE2 expression in epithelial cell lines and tissues known to express ACE2, including respiratory epithelium, intestinal epithelial cells, and kidney-derived samples. In immunoblot experiments, ACE2 protein may appear as bands corresponding to different processed or post-translationally modified forms of the receptor. As a glycoprotein, ACE2 can undergo glycosylation and other modifications that may influence migration behavior during SDS-PAGE analysis. Detection of ACE2 by western blotting therefore allows investigators to evaluate relative protein abundance and to compare ACE2 expression across experimental conditions.

A mouse monoclonal antibody, clone ACE2/7203, recognizes ACE2 protein and supports detection of ACE2 expression in western blotting assays. When used in SDS-PAGE and immunoblot workflows, ACE2 Antibody for WB enables visualization of ACE2 protein bands in lysates prepared from cells or tissues expressing ACE2. Such analyses contribute to studies investigating ACE2 regulation, receptor biology, and the broader role of Angiotensin Converting Enzyme 2 in epithelial signaling and renin-angiotensin pathway regulation.

Application Notes

Optimal dilution of the ACE2 antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-300) from the human protein 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.

Alternate Names

ACE2 receptor antibody, Angiotensin-converting enzyme homolog antibody, ACEH antibody, ACE2 protein antibody

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