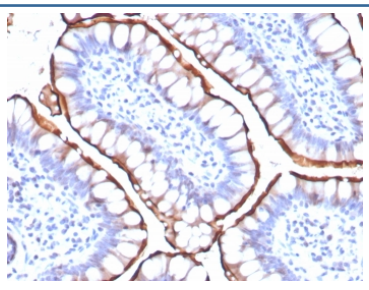
Angiotensin Converting Enzyme 2 Antibody for IHC / ACE2 Antibody [clone ACE2/8748R] (V5346)

Catalog No.	Formulation	Size
V5346-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5346-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5346SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

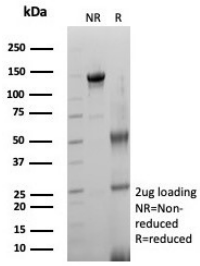
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	ACE2/8748R
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
Limitations	This Angiotensin Converting Enzyme 2 antibody is available for research use only.



Angiotensin Converting Enzyme 2 Antibody for IHC (clone ACE2/8748R) in human small intestine tissue. Immunohistochemistry staining of FFPE human small intestine demonstrates strong membranous and cytoplasmic staining in epithelial cells lining the intestinal villi, consistent with the known epithelial distribution of ACE2 / Angiotensin-converting enzyme 2. The recombinant rabbit monoclonal antibody was applied at 2 ug/ml following heat-induced epitope retrieval by boiling tissue sections in pH 9 Tris with 1 mM EDTA for 20 min. Brown chromogenic signal highlights ACE2-positive intestinal epithelial cells while surrounding stromal elements remain largely negative.



SDS-PAGE analysis of purified, BSA-free Angiotensin Converting Enzyme 2 antibody (clone ACE2/8748R) 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. Angiotensin Converting Enzyme 2 Antibody for IHC enables visualization of ACE2 protein distribution within formalin-fixed paraffin-embedded (FFPE) tissue sections using immunohistochemistry. 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.

Immunohistochemistry studies consistently demonstrate ACE2 expression in epithelial cell populations across multiple organs. In histological tissue sections, ACE2 staining is most commonly observed along the membranes and cytoplasm of epithelial cells lining glandular and absorptive structures. Prominent staining has been reported in intestinal epithelial cells, kidney tubular epithelium, and respiratory epithelial tissues, where ACE2 participates in peptide processing and receptor-associated signaling pathways. Visualization of ACE2 in FFPE tissues allows researchers to examine epithelial localization patterns within intact histological architecture and evaluate expression differences across tissue types.

Angiotensin Converting Enzyme 2 Antibody for IHC is particularly useful for evaluating epithelial staining patterns in normal and disease-associated tissues. Immunohistochemistry allows investigators to identify ACE2-positive epithelial cells while distinguishing them from surrounding stromal, connective, or lymphoid tissue components that typically show little or no staining. This histological context is important for interpreting ACE2 expression patterns in tissues such as gastrointestinal epithelium, renal tubules, and respiratory mucosa, where ACE2 plays roles in epithelial barrier biology and local regulatory signaling networks.

A recombinant rabbit monoclonal antibody, clone ACE2/8748R, recognizes ACE2 protein and supports immunohistochemical detection of ACE2 in human tissues. When applied to FFPE tissue sections, Angiotensin Converting Enzyme 2 Antibody for IHC highlights epithelial cell populations consistent with the known tissue distribution of ACE2. These staining patterns enable researchers to visualize ACE2 expression directly within histological tissue architecture and contribute to studies investigating ACE2 biology in epithelial tissues and disease-related processes.

Application Notes

Optimal dilution of the Angiotensin Converting Enzyme 2 Antibody for IHC should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 705-805) from the human protein was used as the immunogen for the Angiotensin Converting Enzyme 2 antibody.

Storage

Aliquot the Angiotensin Converting Enzyme 2 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