



ACE2 Monoclonal Antibody

Catalog No	YP-mAb-02467
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ACE2
Immunogen	The antiserum was produced against synthesized peptide derived from human ACE2. AA range:416-465
Specificity	ACE2 Monoclonal Antibody detects endogenous levels of ACE2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ACE related carboxypeptidase;ACEH;ACE-related carboxypeptidase; Angiotensin converting enzyme 2;Angiotensin-converting enzyme 2;ACE2; Angiotensin-converting enzyme homolog;Metalloprotease MPROT15
Observed Band	90kD
Calculated Molecular Weight	90kD
Cell Pathway	[Processed angiotensin-converting enzyme 2]: Secreted .; Cell membrane ; Single-pass type I membrane protein . Cytoplasm . Cell projection, cilium . Apical cell membrane . Detected in both cell membrane and cytoplasm in neurons. .; [Isoform 2]: Apical cell membrane .
Tissue Specificity	Expressed in endothelial cells from small and large arteries, and in arterial smooth muscle cells (at protein level) (PubMed:15141377). Expressed in enterocytes of the small intestine, Leydig cells and Sertoli cells (at protein level) (PubMed:15141377). Expressed in the renal proximal tubule and the small intestine (at protein level) (PubMed:18424768). Expressed in heart, kidney, testis, and gastrointestinal system (at protein level) (PubMed:10969042, PubMed:10924499, PubMed:15231706, PubMed:12459472, PubMed:15671045, PubMed:32715618, PubMed:32170560). In lung, expressed at low levels in some alveolar type 2 cells, the expression seems to be individual-specific (at protein level) (PubMed:32425701, PubMed:15141377, PubMed:32715618,



PubMed:32170560, PubMed:33432184). Expressed in nasal epith

Function

cofactor: Binds 1 chloride ion per subunit., cofactor: Binds 1 zinc ion per subunit., enzyme regulation: Activated by chloride and fluoride, but not bromide. Inhibited by MLN-4760, cFP_Leu, and EDTA, but not by the ACE inhibitors lisinopril, captopril and enalaprilat., function: Carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator. Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency. May be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, serve as functional receptor for the spike glycoprotein of both coronaviruses., induction: Up-regulated in failing heart., PTM: N-glycosylation on Asn-90 may limit SARS infectivity., similarity: Belongs to the peptidase M2 family., subunit: Interacts with ITGB1. Interacts with SARS-CoV and HCoV-NL63

Background

angiotensin I converting enzyme 2 (ACE2) Homo sapiens The protein encoded by this gene belongs to the angiotensin-converting enzyme family of dipeptidyl carboxydipeptidases and has considerable homology to human angiotensin 1 converting enzyme. This secreted protein catalyzes the cleavage of angiotensin I into angiotensin 1-9, and angiotensin II into the vasodilator angiotensin 1-7. The organ- and cell-specific expression of this gene suggests that it may play a role in the regulation of cardiovascular and renal function, as well as fertility. In addition, the encoded protein is a functional receptor for the spike glycoprotein of the human coronaviruses SARS and HCoV-NL63. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

Western Blot analysis of various cells using ACE2 Monoclonal Antibody