ARG42476
anti-ACE2 antibody [AC18F] (Biotin)

Package: 50 µg
Store at: 4°C

Summary

Product Description	Biotin-conjugated Mouse Monoclonal antibody [AC18F] recognizes ACE2
Tested Reactivity	Hu
Tested Application	ELISA, FACS, WB
Host	Mouse
Clonality	Monoclonal
Clone	AC18F
Isotype	IgG1, kappa
Target Name	ACE2
Species	Human
Immunogen	Recombinant Human ACE2.
Conjugation	Biotin
Alternate Names	Angiotensin-converting enzyme homolog; ACEH; Angiotensin-converting enzyme 2; Metalloprotease MPROT15; ACE-related carboxypeptidase; EC 3.4.17.23

Application Instructions

Application table

Application	Dilution
ELISA	1:2000 - 1:10000
FACS	1:1000
WB	1:2000 - 1:10000

Application Note: WB: Use ECL as WB substrate. Suggested blocking and dilution buffer is PBST with 0.05% Tween 20 and 5% skim milk. Suggested incubation time is 1 hour at room temperature.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: FACS: HepG2

Properties

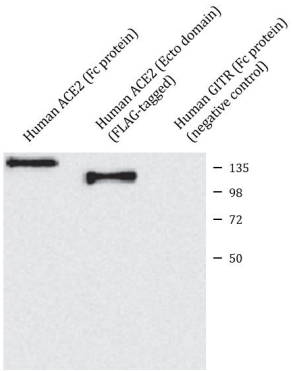
Form	Liquid
Purification	Purification with Protein G.
Purification Note	0.2 µm filter sterilized.
Buffer	PBS (pH 7.4)
Concentration	1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

	gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

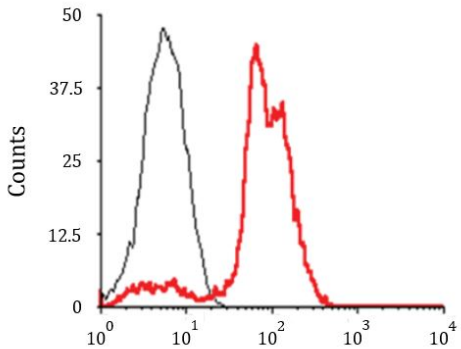
Gene Symbol	ACE2
Gene Full Name	angiotensin I converting enzyme 2
Background	The protein encoded by this gene belongs to the angiotensin-converting enzyme family of dipeptidyl carboxydipeptidases and has considerable homology to human angiotensin 1 converting enzyme. This secreted protein catalyzes the 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]
Function	Carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator (PubMed:10969042, PubMed:10924499, PubMed:11815627). Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency (PubMed:11815627). By cleavage of angiotensin II, may be an important regulator of heart function (PubMed:10969042, PubMed:10924499). By cleavage of angiotensin II, may also have a protective role in acute lung injury (By similarity). Plays an important role in amino acid transport by acting as binding partner of amino acid transporter SL6A19 in intestine, regulating trafficking, expression on the cell surface, and its catalytic activity (PubMed:18424768, PubMed:19185582). (Microbial infection) Acts as a receptor for SARS coronavirus/SARS-CoV. (Microbial infection) Acts as a receptor for Human coronavirus NL63/HCoV-NL63. [UniProt]
Highlight	Related products: ACE2 antibodies; ACE2 ELISA Kits; ACE2 recombinant proteins; Anti-Mouse IgG secondary antibodies; Related news: HMGB1, a biomarker and therapeutic target in COVID-19
Calculated Mw	92 kDa
PTM	N-glycosylation on Asn-90 may limit SARS infectivity. Proteolytic cleavage by ADAM17 generates a secreted form. Also cleaved by serine proteases: TMPRSS2, TMPRSS11D and HPN/TMPRSS1. [UniProt]
Cellular Localization	Processed angiotensin-converting enzyme 2: Secreted. Cell membrane; Single-pass type I membrane protein. Cytoplasm. Note=Detected in both cell membrane and cytoplasm in neurons. [UniProt]

Images



ARG42476 anti-ACE2 antibody [AC18F] (Biotin) WB image

Western blot: Human ACE2 (Fc protein), Human ACE2 (Ecto domain) (FLAG-tagged) and Human GITR (Fc protein) (negative control). The blots were stained with ARG42476 anti-ACE2 antibody [AC18F] (Biotin) at 1:2000 dilution.



ARG42476 anti-ACE2 antibody [AC18F] (Biotin) FACS image

Flow Cytometry: HepG2 cells were stained with ARG42476 anti-ACE2 antibody [AC18F] (Biotin) (red line). Control (black line).