

Store at  
-80C  
#27413**Human ACE2 (18-615) Recombinant Protein (mFc-Tag)**

20 µg


**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**
**MW (kDa):**  
105 (reduced); 350  
(non-reduced)

**UniProt ID:**  
#Q9BYF1

**Entrez-Gene Id:**  
59272
**Description**

Human ACE2 (18-615) Recombinant Protein (mFc-Tag) is derived from a recombinant expression construct corresponding to the extracellular domain of human ACE2 protein, including the sequence regions that function as receptors for SARS and SARS-CoV-2 coronaviruses. The expressed protein contains a murine Fc-Tag at its carboxy terminus.

**Formulation**

Expression Host: Hamster (ExpiCHO)  
Supplied in a PBS solution (pH 7.2).

**Storage**

Stable at -80°C for 3 years after receipt. Avoid repeated freeze-thaw cycles.

**Purity**

>98.5%, determined by SDS-PAGE.

**Background**

ACE2 is a carboxypeptidase that catalyses the conversion of angiotensin I to angiotensin 1-9, or of angiotensin II to the vasodilator angiotensin 1-7 (1). ACE2 is a critical component in the renin-angiotensin system (RAS). ACE2 is predominantly expressed in vascular endothelial cells of the heart and kidney and Leydig and Sertoli cells of the testis (2,3). The unique expression pattern of ACE2 determines its essential role in the regulation of cardiovascular and kidney functions, as well as fertility. ACE2 protein is localized mainly in the extracellular space with its carboxy terminal end attached to the membrane via its transmembrane domain. Active ACE2 enzyme is secreted by cleavage at the amino terminus. Research studies have shown that ACE2 expression is elevated in human failing heart (4). ACE2 has also been identified as the receptor for SARS and SARS-CoV-2 coronaviruses (5-7).

**Background References**

- Schmidt, B.L. et al. (2000) *J Clin Microbiol* 38, 1279-82.
- Boehm, M. and Nabel, E.G. (2002) *N Engl J Med* 347, 1795-7.
- Douglas, G.C. et al. (2004) *Endocrinology* 145, 4703-11.
- Goulter, A.B. et al. (2004) *BMC Med* 2, 19.
- Li, W. et al. (2005) *EMBO J* 24, 1634-43.
- Hoffmann, M. et al. (2020) *Cell* 181, 271-280.e8.
- Lan, J. et al. (2020) *Nature* 581, 215-20.

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