

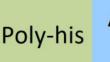
Synonym

ACE-2,ACEH,ACE2

Source

Mouse ACE2, His Tag (AC2-M5248) is expressed from human 293 cells (HEK293). It contains AA Gln 18 - Thr 740 (Accession # Q8R0I0-1). Predicted N-terminus: His

Molecular Characterization



ACE2(Gln 18 - Thr 740) Q8R0I0-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 85.4 kDa. The protein migrates as 90-110 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Delivered as bulk protein in a $0.2~\mu m$ filtered solution of 50~mM Tris, 150~mM NaCl, Arginine, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Storage

Please avoid repeated freeze-thaw cycles.

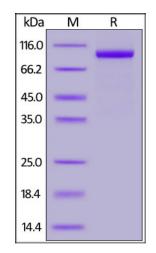
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

Shipping

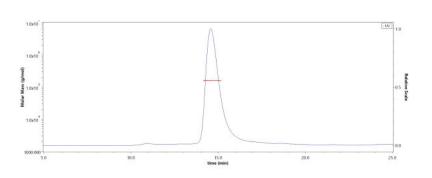
This product is supplied as sterile liquid solution and shipped frozen with dry ice, please inquire the shipping cost.

SDS-PAGE



Mouse ACE2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Mouse ACE2, His Tag (Cat. No. AC2-M5248) was more than 90% and the molecular weight of this protein is around 155-185 kDa verified by SEC-MALS.

Report

Background

Angiotensin-converting enzyme 2 (ACE2) is also known as ACEH (ACE homolog), is an integral membrane protein with considerable homologous to ACE, which belongs to the peptidase M2 family. ACE2 is an exopeptidase that catalyses the conversion of angiotensin I to the nonapeptide angiotensin, or the conversion of angiotensin II to angiotensin 1-7. ACE2 may be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, ACE-2 serve as functional receptor for the spike glycoprotein of both coronaviruses. ACE2 is activated by chloride and fluoride, but not bromide and Inhibited by MLN-

Mouse ACE2 / ACEH Protein, His Tag (MALS verified)





4760, cFP_Leu, and EDTA, but not by the ACE inhibitors linosipril, captopril and enalaprilat. ACE2 is active from pH 6 to 9, and the optimum pH is 6.5 in the presence of 1 M NaCl.

References

- (1) <u>Turner AJ., et al., 2002, Can. J. Physiol. Pharmacol. 80 (4): 346–53.</u>
- (2) <u>Katovich MJ., et al., 2005, Exp. Physiol. 90 (3): 299–305.</u>
- (3) <u>Donoghue M., et al., 2000, Circ. Res. 87:E1-E9.</u>
- (4) <u>Tipnis S.R.</u>, et al., 2000, J. Biol. Chem. 275:33238-33243.
- (5) Vickers C., et al., 2002, J. Biol. Chem. 277:14838-14843.

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.