Synonym

ACE-2,ACEH,ACE2

Source

Human ACE2, Mouse IgG1 Fc Tag(AC2-H5205) is expressed from human 293 cells (HEK293). It contains AA Gln 18 - Ser 740 (Accession # Q9BYF1-1). Predicted N-terminus: Gln 18

Molecular Characterization

ACE2(Gln 18 - Ser 740) Q9BYF1-1	mFc(Val 98 - Lys 324) AAK53870.1

This protein carries a mouse IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 109.8 kDa. The protein migrates as 125-150 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.

Formulation

Supplied as 0.2 μm filtered solution in 50 mM Tris, 150 mM NaCl, Arginine, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

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

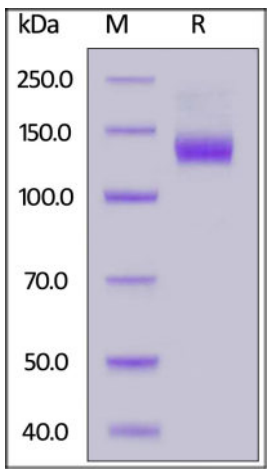
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

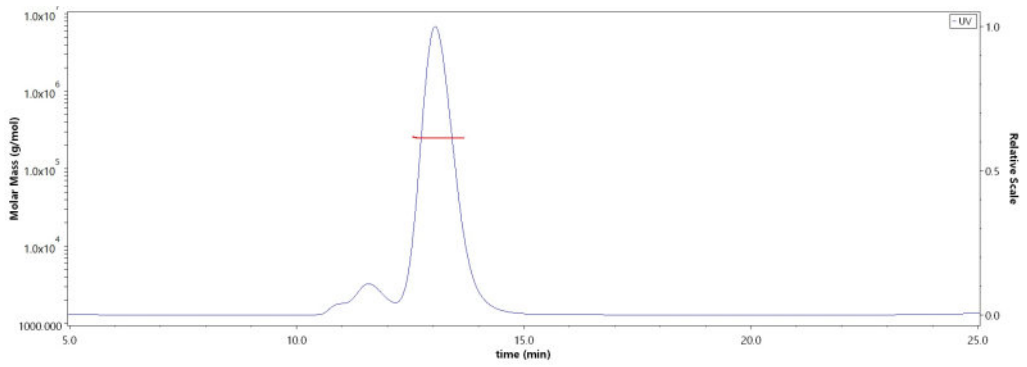
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



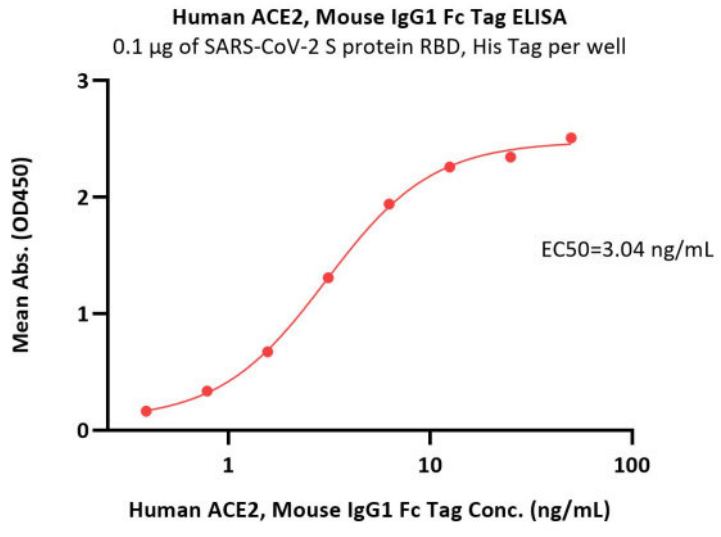
Human ACE2, Mouse IgG1 Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

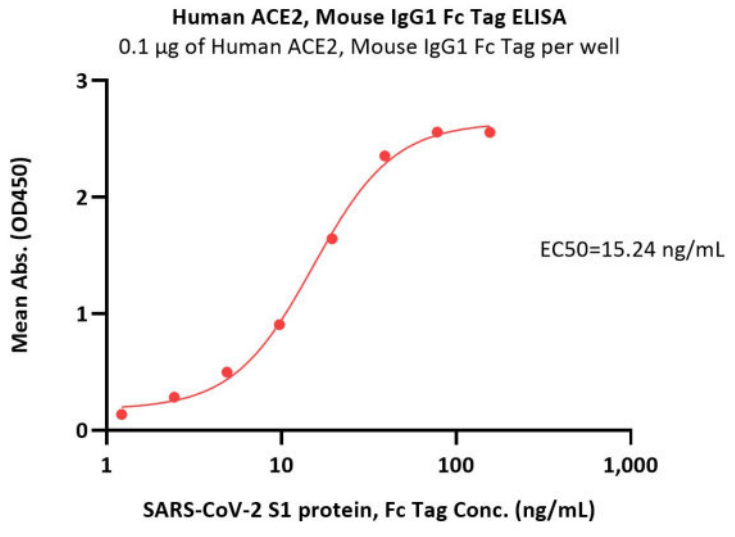


The purity of Human ACE2, Mouse IgG1 Fc Tag (Cat. No. AC2-H5205) is more than 85% and the molecular weight of this protein is around 240-255 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H3) at 1 μg/mL (100 μL/well) can bind Human ACE2, Mouse IgG1 Fc Tag (Cat. No. AC2-H5205) with a linear range of 0.4-6 ng/mL (QC tested).



Immobilized Human ACE2, Mouse IgG1 Fc Tag (Cat. No. AC2-H5205) at 1 μg/mL (100 μL/well) can bind SARS-CoV-2 S1 protein, Fc Tag (Cat. No. S1N-C5255) with a linear range of 1-20 ng/mL (Routinely tested).

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-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.

Clinical and Translational Updates

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