

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived Gln18-Ser740 with a C-terminal 10-His tag Accession # Q9BYF1
N-terminal Sequence Analysis	No results obtained: Gln18 predicted
Structure / Form	Recombinant Human ACE-2 is prone to proteolytic cleavage at C-terminus. The predominant form of the purified protein lacks the His tag.
Predicted Molecular Mass	85 kDa

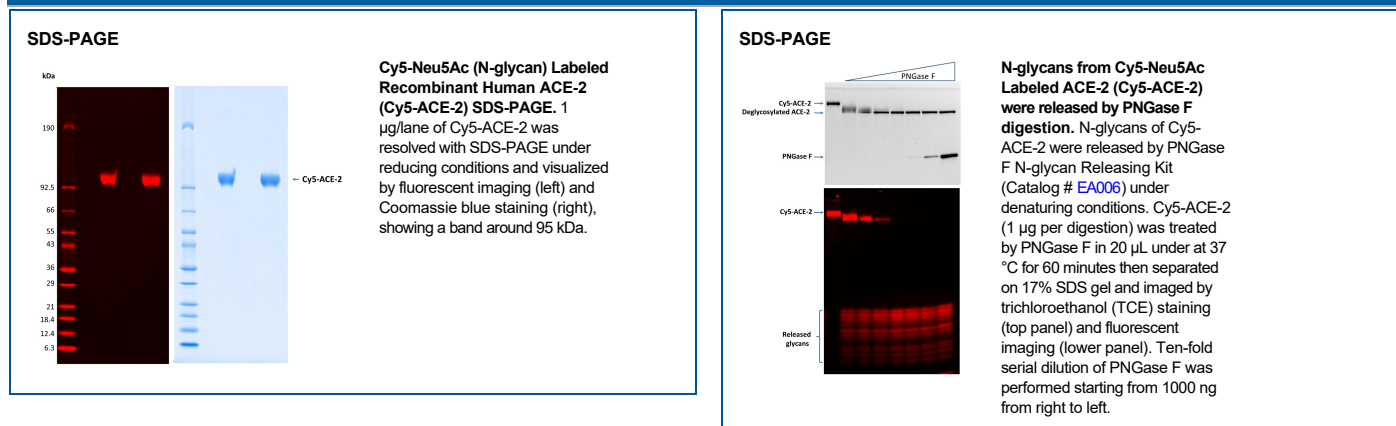
SPECIFICATIONS

SDS-PAGE	101-111 kDa, under reducing conditions.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Supplied as a 0.2 µm filtered solution in Tris and NaCl. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

DATA



BACKGROUND

Angiotensin-converting enzyme 2 (ACE2) is a dipeptidyl carboxydiptidase that catalyzes the cleavage of angiotensin I into angiotensin, and angiotensin II into the vasodilator angiotensin (1, 2). ACE2 is expressed in various organs, especially in heart, testis, and kidney, and plays roles in the regulation of cardiovascular and renal function, as well as fertility (3). ACE2 also serves as the entry point into cells for some coronaviruses, including HCoV-NL63, SARS-CoV, and SARS-CoV-2 (4, 5). ACE2 contains 7 conserved N-glycosylation sites and is a heavily glycosylated glycoprotein (6). Glycosylation of ACE2 also involves in SARS-CoV-2 binding (7). Cy5-Neu5Ac labeled ACE-2 has its complex N-glycans labeled and may serve as a model protein to study glycosylation via glycan fingerprinting (8).

References:

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3. Wang, W. *et al.* (2016) *Hypertension* **68**:365.
4. Li, W. *et al.* (2003) *Nature* **426**:450.
5. Shang, J. *et al.* (2020) *Nature* **581**:221.
6. Towler, R. *et al.* (2004) *J. Biol. Chem.* **279**:17996.
7. Zhao, P. *et al.* (2020) *Cell Host Microbe* **28**:586.
8. Wu, Z.L. and Ertelt, J.M. (2021) *Sci. Rep.* **11**: 20428.