


<p>Grant agreement Start date: 01/04/20 End Date: 31/03/22</p>	
<p>Project Title</p>	<p>OPENCORONA</p>
<p>WP number, deliverable number, and Title</p>	<p>WP1, D1.1, All vaccine candidates, proteins and produced and delivered</p>
<p>Responsible partner name and contact</p>	<p>Partner number: 1 Organisation: KI Name: Matti Sällberg Email: matti.sallberg@ki.se</p>
<p>Nature R-Report P-Prototype D-Demonstrator =-Other</p>	<p>R</p>
<p>Dissemination level PU-public PP-restricted to other programme participants RE-restricted to a group of partners CO-only for consortium members</p>	<p>PU</p>
<p>Delivery Month Planned</p>	<p>M3-July 2020</p>
<p>Actual delivery date (dd/mm/yy)</p>	<p>July 10, 2020</p>

Description of deliverable

- **COMPLETED**

- Twelve of the designed genes have now been synthetically generated by Genescript and delivered to us. All genes have been cloned into pVAX. We are still waiting for five out of six proteins to be produced in E. Coli. We have received the N protein and this has been extensively used in setting up COVID-19 serology and in research. Larger batches of 100 mg have been ordered. The N plasmid and N protein has already been evaluated for immunogenicity in rabbits and mice. This has now been accepted for publication in the Journal of Virology. Large studies in mice have now been initiated using the DNA vaccines. We have initiated a collaboration with Professor Sophia Hober at the Royal Institute of Technology, Stockholm to obtain eucariotically expressed Spike and RBD proteins to be used in detection of antibodies and T cells in animals and humans. The genes have all been sent to partner 3 for analysis of activation of innate responses.

- **STILL ONGOING**

- We are still waiting for delivery of five E. coli expressed proteins.

- **PUBLICATIONS**

- **Ahlén G, Frelin L, Nekoyan N, Weber F, Höglund U, Larsson O, Westman M, Tuvevsson O, Gidlund EK, Cadossi M, Appelberg S, Mirazimi A, and Sällberg M. 2020. The SARS-CoV-2 N protein is a good component in a vaccine. J Virol (Accepted)**
- **Varnaite R, García M, Glans H, Maleki KT, Sandberg JT, Tynell J, Christ W, Lagerqvist N, Asgeirsson H, Ljunggren HG, Ahlén G, Frelin L, Sällberg M, Blom K, Klingström J, Gredmark-Russ S. 2020. Expansion of SARS-CoV-2-specific Antibody-secreting Cells 1 and Generation of Neutralizing Antibodies in Hospitalized COVID-19 Patients (Submitted to J Immunol).**