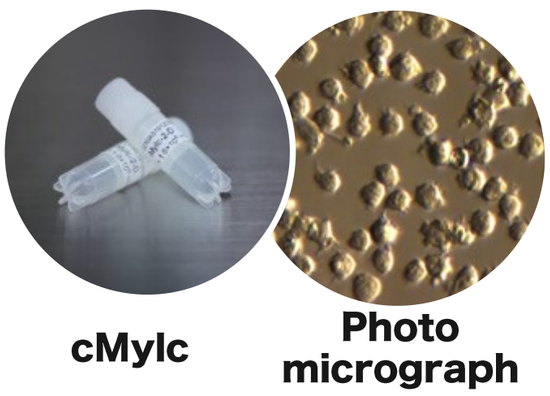
MiCAN

MyIc-SRIPs Evaluation Kit (SARS-CoV-2)

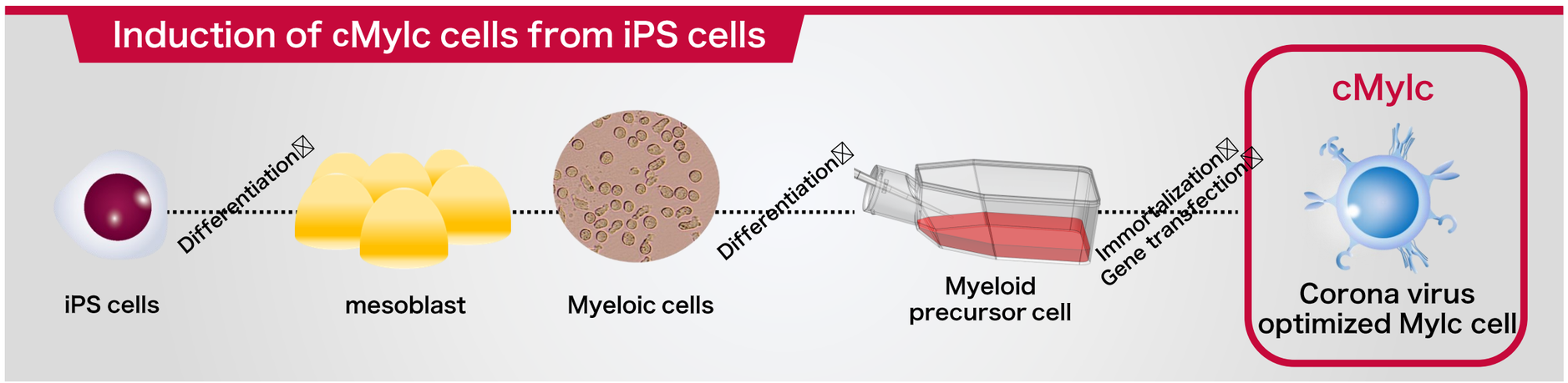
MyIc-SRIPs Evaluation Kit (SARS-CoV-2 virus) can be safely used to assess Corona virus infection and antibody-dependent enhancement of infection (ADE) without using live virus. Evaluation can be started immediately after opening the kit without cell culture.

What is the cMyIc cell

Induction of Immortalized Myeloid lineage cells from iPS cells. It can be used for research as a host cell for various viruses. SARS-CoV-2 research optimized MyIc cells (cMyIc) were prepared by introducing ACE2 and TMPRSS2 into iMyIc cells.

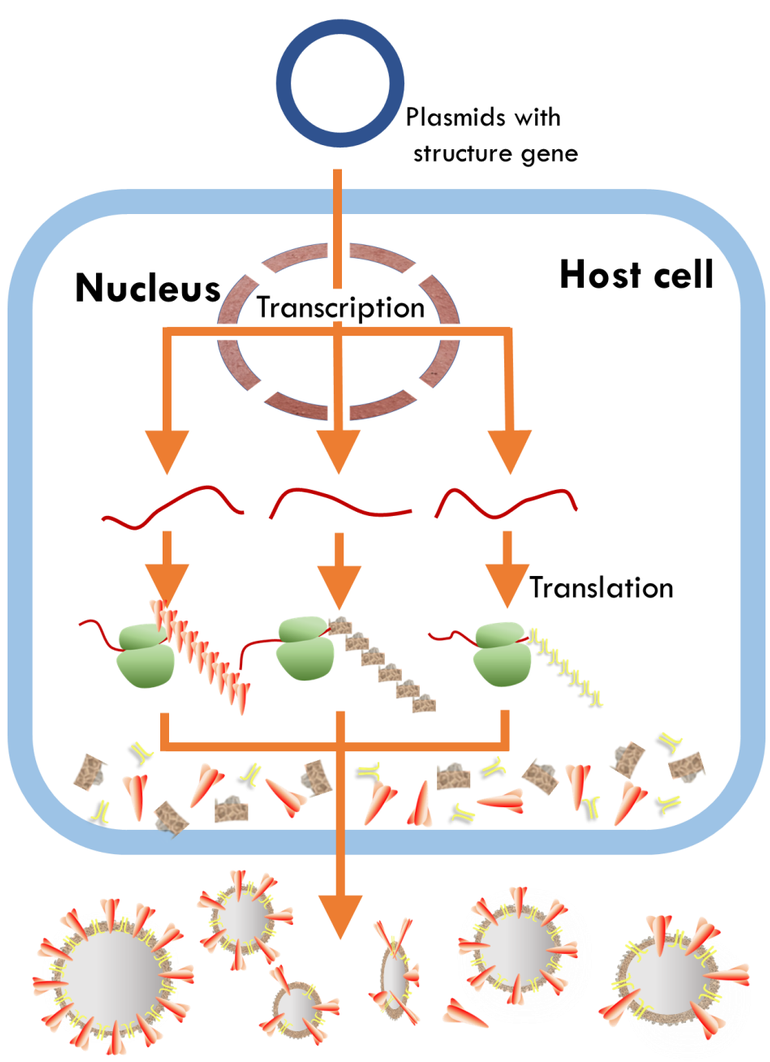


cMyIc　　Photo micrograph

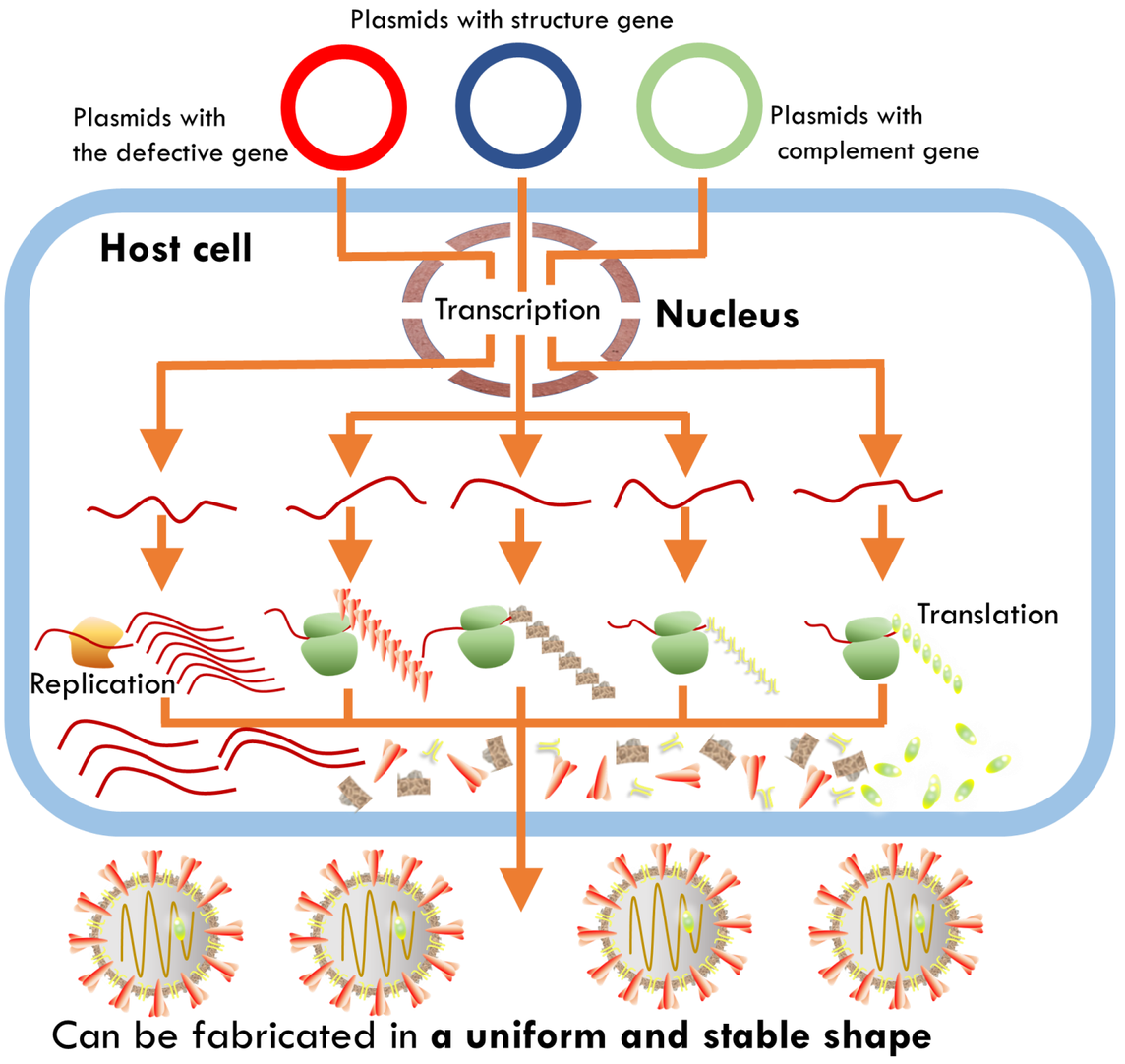


What is the Corona-SRIPs

SRIPs is a pseudo-virus of new technology. Using SRIPs enables safe virus research. However, general pseudo-viruses differ in shape and size as shown in the lower right figure. Corona-SRIPs are single-infectious virus that have the same outer membrane structure as the virus. In particular, it is ideal for assessing virus intrusion.



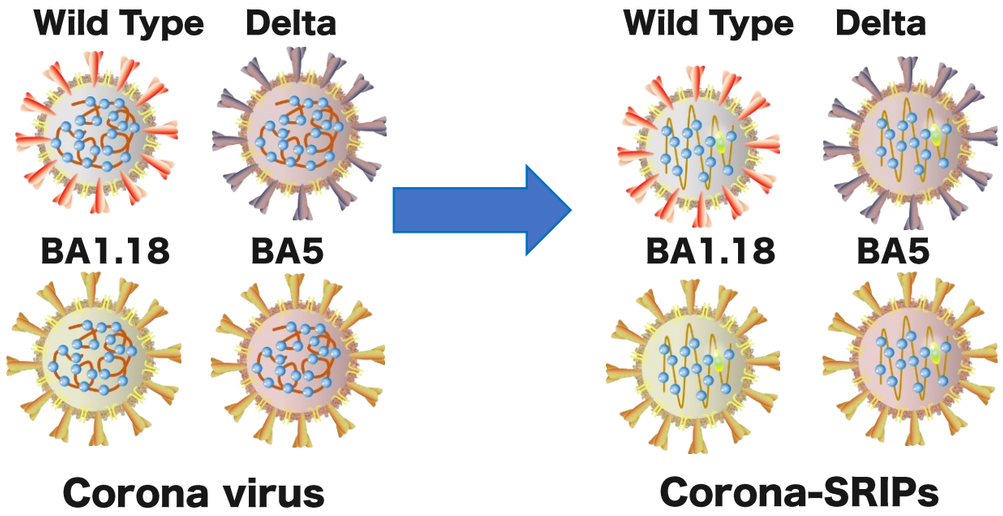
Various shapes due to lack of contents



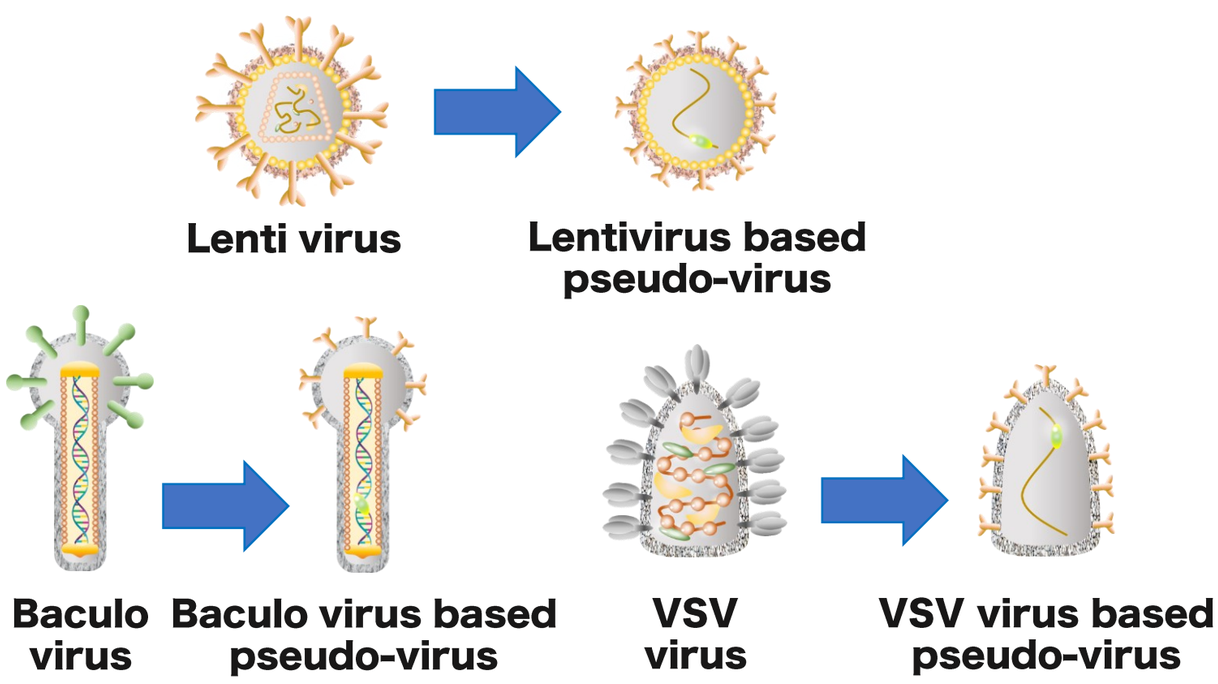
Can be fabricated in **a uniform and stable shape**
→ Closer to the virus

Single-Round Infectious Particles (SRIPs) have the same viral outer membrane as the actual virus, so it is possible to evaluate the actual viral invasion.

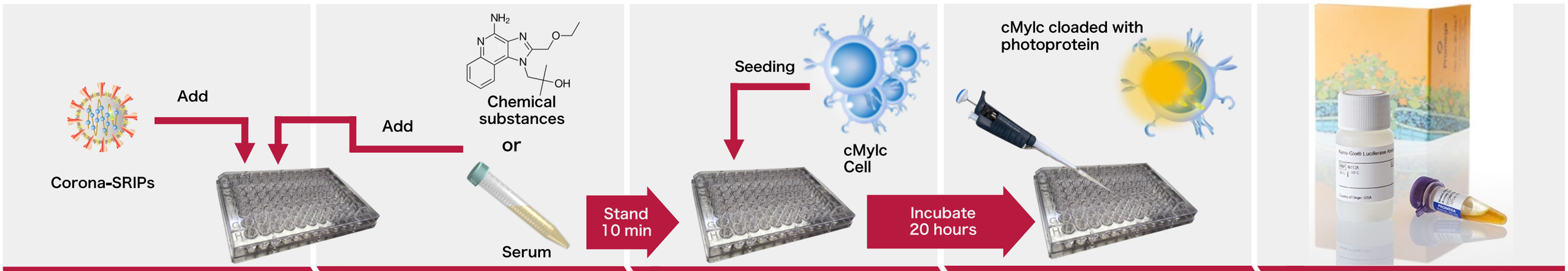
Corona-SRIPs are single infectious viral particles (SRIPs) against SARS-CoV-2 generated by this method. This kit contains Corona-SRIPs (Wuhan, Wild type). We are preparing other important variants.



Creation methods of common pseudo-virus:
The protein part involved in virus invasion is introduced into a safe virus and used as a pseudo-virus.



Evaluation method



STEP 1

Add Corona-SRIPs

Add corona virus-SRIPs to 96 Well Plate.

STEP 2

Add specimen

Add specimen(chemical substances of Serum) to 96 Well plate and Stand 10 min.

STEP 3

Seeding cMylc Cell

Seeding cMylc to 96 Well plate and Incubate 37℃ 5%CO2 20 hours.

STEP 4

Lysate preparation

Preparate Lysate from cMylc and Add luminescent substrate.

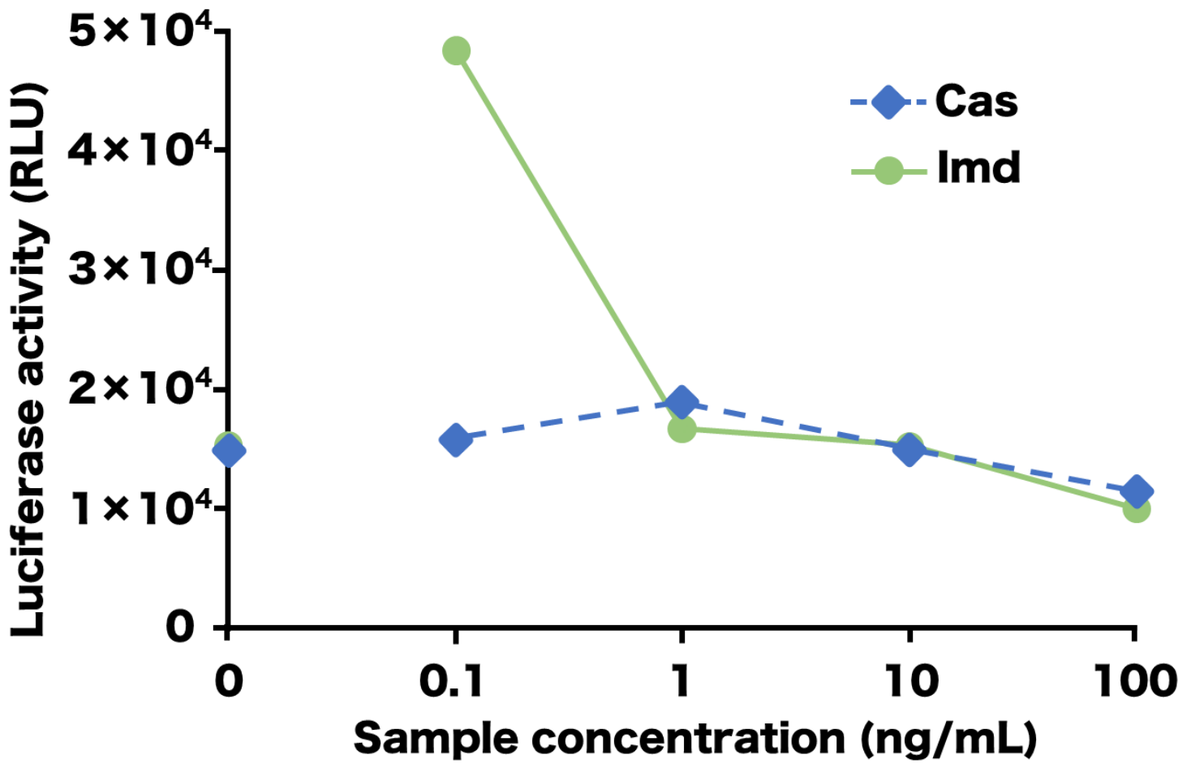
STEP 5

Luminescent Assay

Measure the luminescence intensity using the luminoassay kit as below.

Promega
Nano-Glo® Luciferase Assay Buffer
#N1110

Example test



The results of the evaluation of antibody-dependent enhanced (ADE) response to Corona–SRIPs (Wild type) in cMylc cells.

cMylc cells were treated with a mixture of casiribimab (denoted Cas in the figure) and Imdevimab (denoted as Imd in the figure) antibodies were mixed and reacted with Corona-Srips to perform an antibody-dependent enhanced infection response test.

The results showed that when 0.1 ng/mL of Imdevimab was mixed with 0.1 ng/mL of Imdevimab, the luciferase activity (RLU) was approximately 50,000. This result shows a significant increase in the value compared to the value in the absence of antibodies (about 15,000).

Products for Corona virus SRIPS

Product	Cat. code	Product content
Mylc-COVID-19 ADE Kit (WT)	M01CM03020	cMylc cells Medium for maintain 100mL SARS-CoV-2 Wild Type SRIPs T25 flask 1 piece
COVID-19 SRIP (WT)	MSRIPC1	SARS-CoV-2 Wild Type SRIPs
COVID-19 SRIP (Delta)	MSRIPC2	SARS-CoV-2 Delta SRIPs
COVID-19 SRIP (BA1.18)	MSRIPC3	SARS-CoV-2 Omicron BA1.18 SRIPs
COVID-19 SRIP (BA5)	MSRIPC4	SARS-CoV-2 Omicron BA5 SRIPs

Coming soon!
SARS-CoV-2 Omicron BQ1.1 and SARS-CoV-2 Omicron XBB

Evaluation and research in a common laboratory with Kyoto University

Our headquarters and research laboratory are located in Kyoto-University Katsura Venture Plaza,where Kyoto University Nurtures the creation of new businesses utilizing new Ideas/technologies and intellectual properties.

- Patent application for non-stimulated dendrtic cells for research of viruses (Second product)
- Adopted for the Economic Gardening Support Grant supported by Kyoto Industrial Support Organization 21
- Certified as Management of Wisdom by the Kyoto Chamber of Commerce and Industry (2018)

MiCAN Technologies, Inc.

Kyoto-University Katsura Venture Plaza, 1-36, Goryo-ohara,
Kyoto Nishikyo-ku, Kyoto 615-8245, Japan

075-381-3008

https://micantechnologies.com

info2@micantechnologies.com

MiCAN Technologies