FOR IMMEDIATE RELEASE

New In Vitro Study Suggests PQQ Ingredient Could Aid in Hindering Coronavirus Infections

(Tokyo, Japan – Jan. 17, 2024) – A new study has found that Pyrroloquinoline quinone (PQQ) has antiviral effects that can destroy coronaviruses and help prevent the spread of infections.

Researchers in Japan conducted an invitro study in 2023 using PQQ – a natural compound found in various plant-based foods such as kiwifruit, parsley and green peppers – on Feline Infectious Peritonitis Virus (a virus belonging to the coronavirus family) and discovered that they were less infectious than those viral loads that were not treated with the ingredient.

The results of the study published in the <u>American Chemistry Society</u> indicate that PQQ is effective as a viral inhibitory treatment during early-stage infection. The researchers theorized that these effects were directly related to virion instability, preventing host cell viral entry and replication.

As a powerful antioxidant and anti-inflammatory, PQQ could pave the way for more research into the ingredient's effectiveness in combatting the global spread of coronavirus-related diseases, including COVID-19.

For the study, researchers used a natural source of PQQ, which was developed by Mitsubishi Gas Chemical Co., Inc. (MGC) in Japan under the brand name MGCPQQ[®]. A vast majority of scientific research has been conducted with MGCPQQ specifically.

"We're encouraged by the research's early findings showing PQQ can help protect cells against coronaviruses, particularly when used to treat infections in the early stages," said Atsushi Sugimoto, assistant manager for MGC. "While more testing is needed, the results from this in-vitro study clearly suggest that PQQ has a strong antiviral effect and could one day help serve as a new option for managing symptoms caused by the coronavirus disease."

MGCPQQ is the most studied and tested ingredient of its kind, with dozens of in vitro and in vivo clinical studies and trials dating back 40 years. Research suggests it can stimulate mitochondria – which is vital to cell survival - and help support cognitive health by promoting nerve growth factor in the brain. The ingredient has also demonstrated it can help lower stress, improve sleep and boost energy.

MGCPQQ continues to be the only ingredient of its kind registered on the European Union's List of Novel Foods, and the only PQQ that can be legally sold in the EU. In addition to its EU approval, it is also the only ingredient of its kind with NDI notification from the U.S. Food and Drug Administration (registered under the name BioPQQ[®]).

For more information about MGCPQQ, visit www.mgcpqq.eu. This ingredient is not intended to diagnose, treat, cure or prevent any disease.

About Mitsubishi Gas Chemical Co., Inc.

As a subsidiary of Mitsubishi Gas Chemical Company, Inc. in Tokyo, Mitsubishi Gas Chemical America has been leading the way in the fields of basic chemicals to specialty and advanced materials in the United States since 1984. As a pioneer in its research of pyrroloquinoline quinone (PQQ), Mitsubishi has manufactured a safe, all-natural supplement ingredient that supports cognitive function and mitochondrial biogenesis and is branded as MGCPQQ in Europe, and BioPQQ in North America and Japan. The powerful ingredient is a natural source of PQQ and made through a proprietary fermentation process. MGCPQQ/BioPQQ have multiple certifications and registrations attesting to its safety, efficacy and high-quality standards. For more information, visit <u>www.mgcpqq.eu</u>, <u>www.biopqq.com</u> or <u>www.mgca.com</u>.