

## Case Study : Joint Research Aimed at Establishing Fish Cell Culture Technology

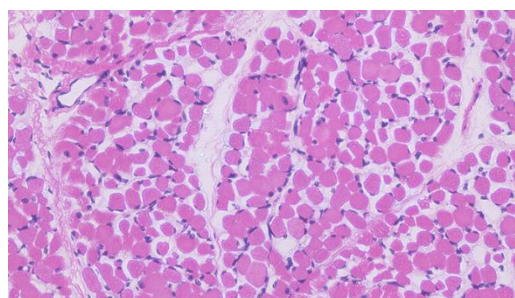
Maruha Nichiro Corporation is promoting joint R&D with IntegriCulture Inc. ("IntegriCulture"), a cell culture startup, and Ichimasa Kamaboko Co. Ltd. ("Ichimasa Kamaboko"), which boasts the top share in the fish paste industry, with the aim of establishing a technology to culture fish muscle cells.

Since August 2021, Maruha Nichiro Corporation has been conducting this research in a two-company collaboration with IntegriCulture. IntegriCulture is an innovative start-up company that develops technologies to lower the cost of culture and increase the scale of cell culture toward the realization of a world where cell agriculture (cell culture) is widespread. The company's own food-grade culture medium and general-purpose large-scale cell culture system, the "CulNet System™," have been confirmed to be effective in cattle and poultry cells, and in this study, Maruha Nichiro Corporation has provided the live fish cells necessary for the verification. Since August 2022, Ichimasa Kamaboko has joined this research and the three companies are working together to develop a large-scale commercial production of cultured fish meat for processed seafood products.

Through these activities, the Company aims to offer food products made with cell culture technology at a price range accessible to consumers, thereby realizing commercial production at the fastest pace in the world and providing sustainable next-generation fish protein in the future.



Culture medium



Culture cells