

March 7, 2019

MITSUBISHI GAS CHEMICAL COMPANY, INC.

Successful Mass-culture of Cells Producing Denosumab Biosimilar candidate

Mitsubishi Gas Chemical Company, Inc. (MGC; Head Office: Chiyoda-ku, Tokyo; President: Toshikiyo Kurai) has established the conditions that enable the mass-culture of cells producing a denosumab biosimilar candidate (referred to as “denosumab-producing cells” below), which is the antibody drug used to treat diseases such as osteoporosis and multiple myeloma.

In order to mass-produce an antibody drug, it is necessary not only to improve the productivity of the cells that produce the antibody used as a drug substance, but also to mass-culture these cells. Maintaining antibody quality while mass-culturing the antibody-producing cells is a key requirement for successful commercial production.

Using the denosumab-producing cells and the relevant manufacturing technology transferred from GlycoNex, an MGC partner, MGC had Cultivecs develop technology for mass-culturing those cells. The MGC subsidiary has now successfully identified the conditions for mass-culturing. With the establishment of the technology for mass-culturing denosumab-producing cells, MGC expects to be able to supply large quantities of a high-quality denosumab drug substance at a low cost.

For possible joint development in the future, MGC will discuss this with a pharmaceutical company interested in commercializing the denosumab biosimilar.

Leveraging the findings gained through developing the mass-culture technology, MGC will continue to develop various antibody drugs.

< About denosumab >

Used for the treatment of diseases such as osteoporosis, multiple myelitis and giant cell tumor of bone, denosumab is the world's first antibody drug to target the RANK ligand, which is the protein required for developing and activating osteoclasts. Denosumab inhibits osteoclast activity.

< Details of Cultivecs >

Company Name : Cultivecs Inc.
Main Operation : Development and manufacturing of antibody drugs
Head Office : 5-2 Mitsubishi Building, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan
Representative Director, President : Masashi Fujii (Director, Managing Executive Officer, MGC)
Foundation : June 7, 2016
Shareholders : MGC/55%, Nippon Kayaku Co., Ltd. /45%

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