

JAPAN ROUNDUP

Sumitomo Chemical Co., Ltd. (Osaka), NEC Corp., (Tokyo) Sumitomo Pharmaceuticals, Kissei Pharmaceutical, and its subsidiary, Kissei Comtec have developed a biochemical expert system called BIOCES which uses drug receptor theory for protein engineering and design of pharmaceuticals and agricultural chemicals. The system operates on an ACOS general-purpose computer.

Sumitomo Pharmaceuticals and Miyazaki Medical School also developed a monoclonal antibody-based diagnostic agent with 500 times greater sensitivity than conventional assays for determining the amount of human growth hormone (hGH) in blood. The new agent was developed using the company's sandwich enzyme immunoassay.

Toyo Jozo (Shizuoko-Ken), a brewer and distiller, has begun marketing a probiotic product named "Toyocerin" with Forum Seeds (U.K.). Sev-

enty percent of pigs in Japan are fed this probiotic, instead of the traditional antibiotic.

Shiseido Co. (Tokyo) has mass-produced a highly pure gamma-linolenic acid in cooperation with the National Chemical Lab for Industry (NCLI). NCLI provided a mold which produces gamma-linolenic acid, and Shiseido provided a glucose-medium fermentation system. The product will be used in Shiseido's cosmetics this autumn.

Snow Brand Milk Products (Tokyo) and a research group at Kyushu University have found—through experiments using poke-weed mitogen—that a substance extracted from the lung cancer cell line PC-8 promotes the division of cells, as much as tripling lymphocyte productivity.

Ajinomoto Co. Inc. (Tokyo) and the Institute of Applied Microbiology of the University of Tokyo have discov-

ered a new antibiotic which suppresses the growth of plants. The substance was extracted and purified from a basidiomycete. In concentrations of 250 ppm, the new antibiotic can disturb growth of plants.

Hitachi, Ltd. (Tokyo) has begun marketing what it calls the first gene injector, the "Laser Micro-injector." From technology developed at the Institute of Physical and Chemical Research, of Japan's Science and Technology Agency (Tokyo), the system uses a laser beam to briefly breach the cell wall, permitting introduction of foreign genes.

Teijin Ltd. (Osaka) and Fujisawa Pharmaceutical Co. (Osaka) will start marketing an artificial saliva called "Saliveht," produced by Fresenius AG, a West Germany-based company. The product is effective against reduced saliva secretion, caused by Sjögren syndrome or by salivary gland disorder.



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(Institute for Biotechnological Research Ltd.)

Mascheroder Weg 1, D-3300 Braunschweig, Tel. (0)531 - 61810

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