

April 22, 2013 GeneFrontier Corporation

## GeneFrontier Announces the Second Alliance Regarding PUREfrex RD

GeneFrontier Corporation, a Japan-based biotech company (hereinafter referred to as GFC) announced today the signature with the Japanese public company of the alliance regarding its proprietary technology, "PUREfrex RD." This is the second deal with PUREfrex RD this year.

GFC has been providing unique products, technologies and services for biological research and biopharmaceutical development. It includes reconstituted cell-free protein synthesis reagent "PUREfrex®" \*1, custom monoclonal antibody generation service based on phage display technology\*2 called HuCAL\*3 developed by MorphoSys AG, and so on. Now, GFC has succeeded in developing an innovative proprietary technology "PUREfrex RD", which significantly improves the efficiency of screening process for development of biopharmaceuticals including antibody drugs.

"PUREfrex RD" is based on ribosome display technology\*4 with "PUREfrex®." In "PUREfrex RD", affinity matured biopharmaceutical candidates can be quickly and easily isolated from the libraries with diversity of more than 100 times larger, in less than half the time, than conventional screening techniques. GFC first introduced "PUREfrex RD" especially for affinity maturation of antibodies at Protein Engineering Summit in May 2012, and now, has signed the second alliance based on "PUREfrex RD" with the Japanese public company. Under the agreement, the company can use "PUREfrex RD" for the screening of protein based ligands or scaffolds for their development of novel biologics.

"We are very happy about this second alliance and new partner with PUREfrex RD. We believe this is the great achievement this year, and the fact also suggests "PUREfrex RD" can duly contribute to development of new biologics including scaffolds." said Dr. Takashi Ebihara, COO of GFC.

GFC will expand collaboration based on PUREfrex RD with pharmaceutical and diagnostics companies, and establish the position as a unique solution provider in the life science field through developing new proprietary products, technologies and services contributing to biological research and biopharmaceutical development.

## Supplements:

- \*1 PUREfrex®: Reconstituted cell-free protein synthesis reagent based on PURE system (Protein synthesis Using Recombinant Elements system).
- \*2 Phage display technology: Screening technique for biopharmaceuticals using a virus infecting Escherichia coli.
- \*3 HuCAL: It represents Human Combinatorial Antibody Library developed by MorphoSys AG. It's a very innovative highly qualified human antibody library with phage display technology.
- \*4 Ribosome display technology: Fully in vitro screening technique for biopharmaceuticals without living cells such as Escherichia coli.