



ONE YEAR, NON-COMMERCIAL LICENSE AGREEMENT FOR RED/ET RECOMBINATION TECHNOLOGY

Definitions

GENE BRIDGES Gene Bridges GmbH, Im Neuenheimer Feld 584, 69120 Heidelberg, Germany.

DNA Engineering Service shall mean: A service offered and provided to any third party on a Commercial Basis for the alteration, generation, cloning or sub-cloning of any nucleic acid generated and/or modified using the Red/ET Recombination Technology and any DNA, RNA, nucleic acid fragment, and vector that contains the same or is derived there from, whether purified or in a mixture (including libraries) or in a living quiescent or dead cell or organism or in a Diagnostic Procedure.

Diagnostic Procedure shall mean: A procedure related to the detection of chosen DNA-or RNA-sequences.

Red/ET Recombination Technology shall mean: A recombination method for a specific modification of *E.coli* compatible DNA target molecules, by in vivo homologous recombination in *E.coli* with a targeting DNA molecule, covered by the Patent Rights covered by US Patents 6,509,156, and 6,355,412 and international patent applications based on PCT/EP 98/07945 and PCT/EP 00/06533. Gene Bridges holds exclusive rights to these patents. The position in which the target molecules are modified is determined by the design of the targeting molecules with which the target molecule recombines. The method also encompasses direct cloning and sub-cloning of targeted DNA sequences from various donor molecules.

Knock-Out shall mean: A DNA construct which is used to, or is intended to, alter a mammalian cell so that said mammalian cell (i) carries a genetic modification resulting from the insertion of the said DNA construct targeted to a predetermined, specific chromosomal location with the intent to alter the function or expression of the gene(s) that was at, or is inserted into, the site of the targeted chromosomal location; and (ii) is or is intended to be used to create a line of mammalian animals (the "Knock-Out Animals"). For clarity, Knock-Out includes the said DNA construct (the "Knock-Out Construct"), the said altered mammalian cell (the "Knock-Out Cell") and the said altered mammalian animal cell line. Knock-Outs include DNA constructs designed to delete all or part of a gene sequence or replace all or part of a gene sequence with a reporter, such as LacZ or GFP, as well as gain-of-function Knock-Outs whereby a DNA sequence is inserted into a predetermined, specific chromosomal location in a mammalian cell with the intention to test the phenotypic impact of the inserted DNA sequences on the said altered mammalian animal line. For example, gain-of-function Knock-Outs include the insertion beside a chosen gene of another gene, the insertion of a dominant negative allele of a chosen gene, the insertion of a cDNA, or the insertion of any other gene with the intent to examine its phenotypic impact in the said altered mammalian animal line. For clarity, a Knock Out Product is commonly known as "receptor modification", "gain-of-function of a specific gene", "conventional knock-out" and "conventional knock-in".

Red/ET Recombination Materials are kits and plasmids from Gene Bridges which enable the recombination method for a specific modification of *E.coli* compatible DNA target molecules, by in vivo homologous recombination in *E.coli* with a targeting DNA molecule, covered by the Patent Rights in US Patents 6,509,156, and 6,355,412 and international patent applications based on PCT/EP 98/07945 and PCT/EP 00/06533.

Commercial Basis, Commercial Purpose shall mean: An action or service for any party in exchange for financial benefits or any other consideration.

Research Purpose shall mean: Any use of the Red/ET Recombination Technology for non-Commercial Purposes in your research facilities. The generation of Knock-Outs is not considered a Research Purpose.

1. Licence Grant and Conditions

1.1. Research: GENE BRIDGES grants Licensee a worldwide, non-exclusive right to use the Red/ET Recombination Technology for Research Purposes only, for the limited period of one year and limited to the use of the Red/ET Recombination Material provided herewith. Licensee will be asked to discard or transfer back to GENE BRIDGES all Red/ET Recombination Material not consumed at the end of the licence period.

1.2. Knock-Outs: GENE BRIDGES grants Licensee a worldwide, non-exclusive right to use the Red/ET Recombination Technology to make up to 25 Knock-Outs per Year (The Knock Out Limit) in its research facilities and the research facilities of

its Affiliates (but not the facilities of any Third Party) - less any Knock-Out purchased or received from GENE BRIDGES during the Year and to use said Knock-Outs for research purposes. The Licensee shall not have the right to sell, have sold, offer for

sale, import or use for resale, export and/or otherwise distribute Knock-Out Cells, Knock-Out Animals or Knock-Out Constructs. For clarity, as used with respect to academic or research institutions, or any other third party, "Affiliate" shall also mean all branches, departments and laboratories of the applicable institution. For clarity, research institutions that are composed of multiple separate research institutions in multiple separate geographic locations like, for example, the Howard Hughes Medical Institute, the National Institutes of Health, the Medical Research Council, the Wellcome Trust, INSERM, CSIRO, the Max-Planck-Gesellschaft or the various state university systems like, for example, California University System is not considered a single set of Affiliates, but each separate research institution is counted individually. However, for universities such as Harvard University, Columbia University, Cornell University, etc., all branches, departments and laboratories of such universities, even if in separate geographic locations, shall be considered as Affiliate of one another.

1.2.1. For purposes of determining the number of Knock-Outs referred to in this license, all DNA constructs, cells or animals carrying the identical genetic alteration shall be counted as one (1) Knock-Out. The Licensee shall use the date of manufacture of the DNA Construct for purposes of determining the number of Knock-Outs that have been made per Year. Any DNA construct that can be shown to have failed to result in a cell with the desired modification shall not be counted as part of the total number of allowed Knock-Outs, provided that buyer documents such failures to Gene Bridges.

1.2.2. An additional license fee of US\$ 100,000 per Knock Out in excess of the Knock Out Limit of 25 Knock Outs per year shall be payable to GENE BRIDGES immediately following any Year in which LICENSEE (including its Affiliates) makes more than the Knock Out Limit. The same applies if the Knock Out Limit is exceeded, where the LICENSEE is supplied by GENE BRIDGES with Knock Outs. Thus, for clarity, said additional license fee per excess Knock Out Product becomes payable immediately following any Year in which LICENSEE (including its Affiliates) makes and/or imports into the U.S (in any combination) more than a total of 25 Knock Outs and/or receives from GENE BRIDGES more than a total of 25 Knock Out Products. The Licensee shall be required to certify annually that the Licensee or its affiliates have not made or obtained more than 25 Knock Outs per year under this license. Gene Bridges retains the right to assign its rights under this license agreement to any Third Party for purposes of enforcing Gene Bridges rights to claim the license fee and damages. The licensee will issue a written statement to Gene Bridges annually confirming that the Licensee has not made more 25 Knock Outs per year.

1.2.3. The right to make up to 25 Knock-Outs per Year may not be sub-licensed by the buyer, nor transferred or assigned to any Third Party. Information about licensing kits or products for commercial purposes is available from: Gene Bridges GmbH, Im Neuenheimer Feld 584, 69120 Germany. Email: Licensing@GeneBridges.com

1.3. This license does not entitle Licensee to use the rights granted for any commercial purpose. For the avoidance of doubt, you are inter alia not entitled to (the following list is not exhaustive):

- make or have made kits or plasmids for sale or transfer based on the Red/ET Recombination Materials
- offer or provide any form of DNA Engineering Service to a third party using the Red/ET Recombination Materials

1.4. Licensee is not entitled to grant any sublicense or transfer or assign the rights under this Agreement.

2. Transfer of Materials

GENE BRIDGES herewith transfers Red/ET Recombination Material to Licensee, which are to be used only in accordance with the license grant as set out under section. Licensee is allowed to transfer, sell, distribute, hand over and/or exchange to any third party any Red/ET Recombination Materials. In addition Licensee is not allowed to amplify, propagate or multiply the provided ET Recombination Material unless required to use the Red/ET Recombination Technology.

3. Improvements

3.1. Licensee is allowed to further develop the Red/ET Recombination Technology but shall report all improvements or modifications of this to GENE BRIDGES.

3.2. Patentable improvements of the Red/ET Recombination Technology and the Red/ET Recombination Materials made solely by Licensee shall belong to Licensee alone. However, in consideration for the rights granted hereunder Licensee shall grant to GENE BRIDGES an irrevocable, worldwide, royalty-free, non-exclusive license with the right to sub-license for all inventions related to Red/ET Recombination Technology and patentable derivatives of Red/ET Recombination Materials.

4. Liability

4.1 GENE BRIDGES does not take over any guarantees and assurances with regard to the licence and the licence object.

4.2 Both parties are aware of and acknowledge the risk of an Intellectual Property Right (IPR) being invalidated or an application of an IPR being rejected. This does not affect the validity of this Agreement. Entitlements to revocation - or damages - are excluded.

4.3 GENE BRIDGES does not accept liability for the existence of the IPR nor for certain fields of protection of the same, except in cases of positive knowledge or gross negligence. Furthermore, GENE BRIDGES does not accept liability for the existence of third party rights.

4.4 GENE BRIDGES does not accept liability for service deficiencies (technical service or usage as well as the usage of the licence object), except in cases of positive knowledge or gross negligence. Under no circumstance does GENE BRIDGES accept liability for the economical usage of the IPR.

4.5 Damage entitlements instead of benefits due to an initial impossibility or quality defect as laid out in sec. 311a Para. 2 of the German Civil Code (BGB) are limited to the negative interest.

4.6 Mutual damage entitlements of the contracting parties are limited to the compensation for typical damage. The entitlement to compensation for lost revenue is excluded. These limitations do not apply in cases of willfulness and gross negligence.

5. Intellectual Property Rights

5.1. GENE BRIDGES is not obliged to uphold and/or defend any IPR.

5.2. Licensee shall forthwith give notice in writing to GENE BRIDGES of any actual, suspected or threatened infringement of GENE BRIDGES' IPR. GENE BRIDGES shall take all necessary steps which GENE BRIDGES at its sole discretion may from time to time consider to be necessary to protect its IPR and you promise to support GENE BRIDGES in any necessary and possible way in such proceedings.

5.3. Licensee will not challenge the IPR during the duration of this Agreement, and not support third parties in any such challenge.

6. Termination

6.1. This Agreement expires automatically after one year except for any material breach of this Agreement which may lead to a termination without notice.

6.2. Furthermore, this Agreement expires if the last protected IPR of GENE BRIDGES runs out of protection.

7. General Conditions

7.1. Amendments and modifications to this Agreement including the amendment and modification of this provision must be in writing.

7.2. This Agreement shall be governed by and interpreted under the laws of the Federal Republic of Germany.

7.3. The parties hereby unconditionally submit to the exclusive jurisdiction of the District Court of Düsseldorf, Germany.

7.4. This Agreement may be assigned in whole or in part by GENE BRIDGES to its successors in interest, assigns, trustees and other legal representative.