

Gene Synthesis Conditions of Sale

1. These conditions will apply in addition to the Thermo Fisher Scientific general conditions of sale (which can be found at www.thermofisher.com) ("General Terms") if you are purchasing Gene Synthesis Services; or any Work Products derived from performance of such Gene Synthesis Services.
2. Defined terms not otherwise defined in these conditions at sections 1, 17 and 18 will have the meaning ascribed to them in the General Terms.
3. In case of inconsistency between General Terms and the terms set forth herein, the terms set forth herein shall take precedence.
4. We may cancel the Agreement and/or your purchase order if we become aware of infringement of third party intellectual property and/or violations of laws, regulations and rules (e.g. but not limited to export regulations) by the performance of the Services and/or the delivery of the Work Products to you. As a member of IGSC, we routinely screen all purchase orders for biosecurity in compliance with the IGSC harmonized screening protocol. We reserve the right to refuse any purchase order or to involve government authorities, if Materials may be of dual use nature.
5. Due to the scientific nature of the Gene Synthesis Services there may be situations where it is not possible to complete the Gene Synthesis Services. Should this happen, we will contact you to discuss alternative options (e.g. delivering sub-fragments or performing alternative services). We reserve the right to charge for partial services and/or alternative services performed.
6. You shall not be able to make a claim for breach of warranty where the Work Products and/or Gene Synthesis Services contain customary reasonable variations from the specifications under the Agreement in relation to measures, yield and quality of the Work Products, and/or Gene Synthesis Services.
7. All nucleic acids or genes designed, *de novo* synthesized and characterized by the performance of the Gene Synthesis Services under the Agreement will be fully sequence verified with the exception of Strings™ DNA Fragments, which are bulk sequenced. We may not be able to verify sequences with a high degree of internal repetition or strong secondary structures. In this case, when intermediate products have previously been sequence verified, we will deliver the final construct length verified.
8. We can provide Work Products and/or Gene Synthesis Services via (sub)contractors or affiliates.
9. If you are purchasing Work Products, and/or Gene Synthesis Services we may deliver the sequences in any appropriate cloning vector. We do not accept responsibility for the correctness of the vector backbone sequence, the presence or absence of restriction sites, antibiotic markers, promoters or other sequence elements in the vector backbone unless such sequence verification is part of the specifications of the services requested by you and accepted by us under the Agreement. Our standard cloning plasmids (out of the pMX-series) serve as carriers for the *de novo* synthesized DNA only and we expressly disclaim any liability for any other use.
10. a) Except as otherwise expressly agreed in the Agreement, you will be the exclusive owner of (i) the Work Products, (ii) Materials, (iii) any derivatives or modifications of Materials that we generate as a direct result of the Gene Synthesis Services, and (iv) any Inventions that directly result from our performance of the Gene Synthesis Services and that directly relate to Materials and/or are based on your Confidential Information, whether or not copyrightable or patentable. At your request and expense, we will do all things reasonably necessary to assist you in obtaining patents or copyrights on any Inventions.

b) Notwithstanding the foregoing and for the avoidance of doubt, you shall have no rights regarding the Gene Synthesis Technology, which rights shall remain exclusively with us, except to the extent expressly provided for in this paragraph. In the event Work Products incorporate any Gene Synthesis Technology, we will grant and do hereby grant to you a perpetual, non-exclusive, fully paid-up worldwide license to use such Gene Synthesis Technology incorporated into such Work Products, solely as incorporated into and solely as necessary to use such Work Products, subject to the terms of the Agreement and subject to clause 11(b). Such conditional license shall, however, not include the right to use such Gene Synthesis Technology to independently recreate Work Products.
11. a) Work Products are intended for research use only. However, except for the restrictions set forth in 11 b) and c), we will not place any additional obligations or restrictions on your use of Work Products as a result of the methods employed by us in the performance of the Gene Synthesis Services.

b) The following Work Products obtained by the performance of Gene Synthesis Services are restricted for research use only: (i) bacterial glycerol stocks and stab cultures; and (ii) cell lines, or cloning and expression vectors provided by us. For information on obtaining rights for any use beyond research use please contact us at outlicensing@thermofisher.com

c) Software may only be used by you, for your internal purposes only, and not for any commercial purpose. Unless we agree otherwise you will (i) not use the Software as a second opinion to or for the evaluation of results obtained by using any other optimization software, (ii) not synthesize or reverse engineer or have a third party synthesize or reverse engineer the optimized sequences generated using the Software, and (iii) use the results, in particular the sequences, generated using the Software only for the purposes of placing an order with us. If you do not place an order with us we shall retain ownership of any results, in particular the DNA sequences, you generate by using the Software
12. For Gene Synthesis Services and Work Products you are responsible for determining if there are any restrictions of use as a result of any third party patents and other proprietary rights and we take no responsibility for this. We expressly disclaim any implied warranties of merchantability or fitness of such Work Products for a particular purpose or use. You are solely responsible for qualifying such Work Products for any use and for obtaining any intellectual property rights that might be required with respect to your use.
13. You hereby acknowledge that the Work Products have no Approvals for use in clinical, diagnostic or therapeutic procedures, or for any other use requiring compliance with Regulatory Laws. You further acknowledge that Work Products have not been tested or validated for any particular use or purpose or for safety or effectiveness. It is your responsibility to test, validate or take other actions necessary for any specific use or applications and to ensure the Work Products and/or materials that may be generated by or through the use of the Work Products and/or their use meet applicable regulatory, certification, validation or other requirements. The Work Products may not be used for any purpose (including but not limited to the development and/or manufacture of any product and/or performance of any service) that would require Approvals unless proper Approvals are obtained in advance. You agree that if you elect to use the Work Products for a purpose that would subject us or the Work Products to the jurisdiction of any Regulatory Laws, you will be solely responsible for obtaining any required Approvals and otherwise ensuring that your use of the Work Products complies with such Regulatory Laws.
14. You are solely responsible for the use, handling, storage and disposal of the Work Products in accordance with any applicable laws and regulations and we expressly disclaim any liability in this regard.
15. a) You will provide us with Materials specified in the Agreement in compliance with applicable laws and regulations and in sufficient amounts, as well as relevant safety information (including any biological, toxic, radiological or chemical hazards associated with the handling, transport, exposure to, or other use of the Materials) and other characteristics of Materials that we need to perform the Gene Synthesis Services, including without limitation any certification or documentation of Materials or biosecurity information we reasonably request of you.

b) When ordering Gene Synthesis Services based on Materials you represent and warrant (i) that you have the right to use and have us and any Authorized Recipients use the Materials and that such right includes, in particular, to have us perform Gene Synthesis Services with the Materials on your behalf and (ii) that the delivery of Work Products by us to you shall not violate any applicable laws and will not result in any infringement or misappropriation of any third party intellectual property right as a result of the employment of Materials. We hereby undertake (i) to use the Materials solely for the Purpose including Analytical Methods; and (ii) not to analyze the Materials or cause the Materials to be further analyzed, except to the extent necessary for the Purpose or comply with applicable laws and regulations, without

your prior written consent; and (iii) not to use the Material for any commercial exploitation except to the extent necessary for the Purpose without your prior written approval.

16. You agree to and shall indemnify and hold harmless us and our affiliates and our officers, agents, and employees from and against any action, claim, or liability, including attorneys' fees, arising out of i) any breach of the representation and warranty at section 15b), ii) your use, handling, storage or disposal of the Work Product, including but not limited to any claims of patent infringement or other intellectual property-related claims, iii) your failure to obtain any necessary Approvals or iv) your failure to comply with any applicable laws including but not limited to Regulatory Laws.

17. Confidentiality. During the term of this agreement and for a period of five (5) years thereafter all Confidential Information disclosed by disclosing party ("Disclosing Party") shall be treated by the receiving party ("Receiving Party") as proprietary and confidential to Disclosing Party. Receiving Party shall protect the Confidential Information of the Disclosing Party by using the same degree of care as Receiving Party uses to protect its own materials and information, but in any event no less than a reasonable degree of care.

Receiving party agrees not to disclose Confidential Information to any third person except its employees, consultants, and (sub)contractors ("Authorized Recipients") as necessary for purposes of fulfilling its obligations hereunder. All such Authorized Recipients shall be informed of the confidentiality obligations hereunder and shall be bound by employment or written confidentiality obligations at least as strict as those specified herein.

Notwithstanding any other provisions herein, however, the Receiving Party shall have no obligation to the Disclosing Party for any information or material that is (a) already known to the Receiving Party; (b) publicly known other than by a wrongful act of the Receiving Party; (c) received from a third party lawfully entitled to disclose it; (d) disclosed pursuant to an enforceable order of a court or administrative agency; and/or (e) independently developed by or for the Receiving Party.

18. We may provide you with certain informational services, including but not limited to design and assembly of sequence, choice of vector, insert and cloning site and strategy, expression product design, sequence optimization for expression host and help on choice of service packages ("Informational Services"). You acknowledge and agree that Informational Services are provided free of charge and are provided for informational purposes only and cannot be relied upon by any party for any purpose. We make no warranties, representations or indemnities whatsoever as to the viability, validity, accuracy, applicability, efficacy, utility of any Informational Services and/or suggestions arising from such Informational Services, or as to whether or not the Informational Services and/or suggestions arising from such Informational Services may infringe any third party patents or other proprietary rights. It remains your responsibility to evaluate and validate all the Informational Services and/or suggestions arising from such Informational Services and ensure that you have obtained any third party intellectual property rights required.

19. Definitions

"Analytical Methods" means methods, workflows, or techniques used or developed by us (including machine-learning or other artificial intelligence functionality) for analyzing, detecting, optimizing, validating, managing, and/or measuring Materials and/or Work Products to improve validation and quality of Gene Synthesis Services provided by us.

"Approvals" means all necessary clearances, approvals, registrations, licenses or certifications required from any regulatory agency to permit use in diagnostic or therapeutic procedures, or for any other use requiring compliance with any law or regulation regulating diagnostic products or any similar product.

"Confidential Information" means any tangible or intangible non-public information and data of a confidential or proprietary nature, including but not limited to technical, commercial, details of third party relationships, existing or contemplated inventions developmental, operating, performance, pricing, know-how, and process information, Materials, Work Products and all record bearing media (inclusive of samples and electronic media) containing or disclosing such information and techniques.

"Gene Synthesis Services" means gene or gene variant synthesis and/or sequence modification, sequence optimization or design, nucleic acid assembly, cloning into vectors and vector construction services, gene mutagenesis, genome modification, gene library construction production, plasmid preparations, bacterial transformation, expression verification and protein production and purification provided by us to obtain Work Products as specified in the respective quotation.

"Gene Synthesis Technology" means technology owned, developed or licensed by us that we use for Gene Synthesis Services including but not limited to Analytical Methods, know how, copyrights, patent applications, patents, trademark applications, trademarks, and any improvements, modifications, design, adaptations, reexaminations, reissues, divisions, continuation, continuation in part or up-grades thereof.

"IGSC" means the International Gene Synthesis Consortium.

"Inventions" means any patentable composition of matter, device, product, use of product, process, treatment, or improvement thereof excluding Gene Synthesis Technology.

"Materials" means i) any biological or chemical agent including but not limited to plasmid(s), nucleic acids, cells or cell line(s), bacteria, virus, reagents (whether prepared by you or obtained by you from other commercial sources) and ii) any information or data including, but not limited to, nucleic acid sequence or protein sequence information related to and/or required for the performance of Gene Synthesis Services.

"Purpose" means performance by us of Gene Synthesis Services.

"Regulatory Laws" means any law or regulation regulating clinical, diagnostic or therapeutic products or any similar product.

"Software" means our proprietary GeneOptimizer™ software tool.

"Work Products" means products derived from our performance of Gene Synthesis Services pursuant to the applicable order confirmation and delivered by us to you.