

**EXPORT LICENSE**

NRC FORM 250  
(10-07)



**United States of America**  
Nuclear Regulatory Commission  
Washington, D.C. 20555

**NRC LICENSE NO.:** XMAT443

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**NRC DOCKET NO.:** 11006301

**LICENSE EXPIRES:** June 30, 2023

Pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974 and the regulations of the Nuclear Regulatory Commission (NRC) issued pursuant thereto, and in reliance on the statements and representations herefore made by the licensee, a license is hereby issued to the licensee authorizing the export of the materials and/or production or utilization facilities listed below, subject to the terms and conditions herein.

<p align="center"><b>LICENSEE</b></p> <p>Vertex Pharmaceuticals Incorporated 50 Northern Ave Boston, MA 02210</p> <p>Attn: Paula Rothwell</p>	<p align="center"><b>ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES)</b></p> <p align="center">See following page(s)</p>
<p align="center"><b>INTERMEDIATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES)</b></p> <p align="center">None</p>	<p align="center"><b>OTHER U.S. PARTY(IES) TO EXPORT</b></p> <p align="center">See following page(s)</p>

**APPLICANT'S REFERENCE:** Application dated 01/30/18

**ULTIMATE DESTINATION(s):** China

<p align="center"><b>QUANTITY(IES)</b></p> <p>5,000 kilograms</p>	<p align="center"><b>DESCRIPTION OF MATERIAL(S) OR FACILITY(IES)</b></p> <p>Deuterium in the form of deuterium gas, deuterium oxide, and deuterium compounds.</p> <p><b>CONDITION:</b> A license amendment request is required for the addition of any intermediate consignees to this export license.</p>
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Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974.

This license is subject to the right of recapture or control by Section 108 of the Atomic Energy Act of 1954, as amended, and to all the other provisions of said Acts, now or hereafter in effect and to all valid rules and regulations of the NRC.

**THIS LICENSE IS INVALID UNLESS SIGNED BELOW  
BY AUTHORIZED NRC REPRESENTATIVE**

**SIGNATURE:** \_\_\_\_\_

**NAME AND TITLE:** David L. Skeen, Deputy Director  
Office of International Programs

**DATE OF ISSUANCE:** May 10, 2019

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**ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES):**

1. CARBOGEN AMCIS (Shanghai) Co., Ltd.  
No. 69 Shungong Road  
Shanghai Chemical Industry Park  
Shanghai  
China

(manufacture active pharmaceutical ingredients for non-nuclear end use in clinical trials for the treatment of cystic fibrosis)

2. Changzhou SynTheAll Pharmaceutical Co., Ltd.  
589 North Yulong Road  
XinBei District  
Changzhou 213127  
China

(manufacture active pharmaceutical ingredients for non-nuclear end use in clinical trials for the treatment of cystic fibrosis)

3. Shanghai SynTheAll Pharmaceutical Co., Ltd.  
9 Yuegong Road  
Jinshan District  
Shanghai 201507  
China

(manufacture active pharmaceutical ingredients for non-nuclear end use in clinical trials for the treatment of cystic fibrosis)

**OTHER U.S. PARTY(IES) TO EXPORT:**

1. Aldrich Chemical Co. LLC  
6000 N. Teutonia Avenue  
Milwaukee, WI 53209  
(supplier/distributor)
2. Aldrich Chemical Co. LLC  
3858 Benner Road  
Miamisburg, OH 45342  
(supplier/distributor)
3. Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
(supplier/distributor)
4. Sigma Aldrich Fine Chemicals  
(SAFC) 5485 Country Road V  
Sheboygan Falls, WI 53085  
(supplier/distributor)