


NRC FORM 7 (02-2016) 10 CFR 110		 U. S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3150-0027		EXPIRES: 11/30/2018	
APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) <i>(See Instructions on Pages 4 and 5)</i>							
PART A. FOR NRC USE ONLY			<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC			DATE RECEIVED 3/13/18	
LICENSE NUMBER X5008848		DOCKET NUMBER 11006299			ADAMS ACCESSION NUMBER		
PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS, OR CONSENT REQUESTS <i>(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)</i>							
1. NAME AND ADDRESS OF APPLICANT/LICENSEE Vertex Pharmaceuticals Incorporated 50 Northern Ave Boston, MA 02210				1a. NAME OF APPLICANT'S CONTACT Paula Rothwell		1b. APPLICANT'S REFERENCE NUMBER	
				1c. PHONE NUMBER (617) 835-9857		1d. FAX NUMBER (857) 263-4405	
				1e. E-MAIL ADDRESS Paula_Rothwell@vrtx.com			
2. TYPE OF ACTION REQUESTED <i>(Check One)</i>							
<input checked="" type="checkbox"/> EXPORT (Parts B, C, E)		<input type="checkbox"/> IMPORT (Parts B, D, E)		<input type="checkbox"/> AMENDMENT/RENEWAL Current License Number:		<input type="checkbox"/> CONSENT REQUEST (Parts B, C) Current License Number:	
3. CONTRACT NUMBER(S)		4. FIRST SHIPMENT DATE 2/1/2018		5. LAST SHIPMENT DATE 2/1/2023		6. PROPOSED EXPIRATION DATE	
PART C. TO BE COMPLETED FOR EXPORT LICENSES, AMENDMENTS, OR RENEWALS <i>(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)</i>							
7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT Exporter : Vertex Pharmaceuticals 50 Northern Ave Boston , MA 02210 Also see page 3 for additional Supplier addresses			8. NAME(S) / ADDRESS(ES) OF INTERMEDIATE FOREIGN CONSIGNEE(S)			9. NAME(S) / ADDRESS(ES) OF ULTIMATE FOREIGN CONSIGNEE(S) F.I.S. - Fabbrica Italiana Sintetici S.p.A. Viale Milano 26 - 36075 Montecchio Maggiore (Vicenza) Italy	
7a. FUNCTION(S) PERFORMED/SERVICE(S) PROVIDED Supplier/Distributor			8a. INTERMEDIATE USE(S)			9a. ULTIMATE END USE(S) See page 3	
10. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS; FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT Non-radioactive Deuterium gas Deuterium oxide Deuterium compounds				10a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq) 5000 kgs		10b. MAX ENRICHMENT OR WGT % 99.99%	10c. MAX ISOTOPE WGT (KG) N/A non-radioactive material , not radioactive waste
11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)							

NRC FORM 7
(02-2016)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

LICENSE NUMBER <i>XS 28840</i>	DOCKET NUMBER <i>11006299</i>	ADAMS ACCESSION NUMBER	<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC
-----------------------------------	----------------------------------	------------------------	---

PART D. TO BE COMPLETED FOR IMPORT LICENSES, AMENDMENTS, OR RENEWALS

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

12. NAME(S) / ADDRESS(ES) OF FOREIGN SUPPLIERS AND/OR OTHER PARTIES TO IMPORT	13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S)	14. NAME(S) / ADDRESS(ES) OF ULTIMATE U. S. CONSIGNEE(S)	
12a. NRC EXPORT LICENSE NUMBER(S) <i>(if applicable)</i>	13a. LICENSE NUMBER(S) / EXPIRATION DATE(S)	14a. LICENSE NUMBER(S) / EXPIRATION DATE(S)	
	13b. INTERMEDIATE USE(S)	14b. ULTIMATE END USE(S)	
15. DESCRIPTION OF RADIOACTIVE MATERIALS, SEALED SOURCES, NUCLEAR FACILITIES	15a. MAX TOTAL VOLUME / ELEMENT WGT (KG), OR TOTAL ACTIVITY (TBq)	15b. MAX ENRICHMENT OR WGT %	15c. MAX ISOTOPE WGT (KG)

16. FOREIGN OBLIGATIONS (BY COUNTRY AND BY PERCENTAGE OF MAXIMUM TOTAL VOLUME)

PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR CONSENT REQUEST(S)

17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, AND/OR ON SEPARATE SHEETS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	17a. COPIES OF RECIPIENTS' AUTHORIZATIONS PROVIDED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
---	---

18. CERTIFICATION: I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information provided is correct to the best of my knowledge.

18a. PRINT NAME AND TITLE OF AUTHORIZED OFFICIAL Paula Rothwell Logistics Manager	18b. SIGNATURE -- AUTHORIZED OFFICIAL <i>Paula Rothwell</i>	18c. DATE <i>1-30-18</i>
--	--	-----------------------------

NRC FORM 7
(02-2016)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

LICENSE NUMBER <i>X5009848</i>	DOCKET NUMBER <i>11006297</i>	ADAMS ACCESSION NUMBER	<input checked="" type="checkbox"/> PUBLIC OR <input type="checkbox"/> NON-PUBLIC
-----------------------------------	----------------------------------	------------------------	---

ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

NRC7. Part C. 7 (Cont.) NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover MA 01810

Aldrich Chemical Co. LLC
6000 N. Teutonia Avenue
Milwaukee, WI 53209

Aldrich Chemical Co. LLC
3858 Benner Road
Miamisburg, OH 45342

Sigma Aldrich Fine Chemicals (SAFC)
5485 County Road V
Sheboygan Falls, WI 53085, USA

NRC7. Part C. 9a Ultimate end use

Vertex plans to utilize the deuterium compounds to manufacture active pharmaceutical ingredients (APIs). These APIs will be utilized in clinical trials as part of a potential triple combination therapy for the treatment of Cystic Fibrosis. No material will be used in any activity related to isotope separation , heavy water production , or in the fabrication of nuclear fuel.