

U. S. ATOMIC ENERGY COMMISSION  
BYPRODUCT MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 30, Licensing of Byproduct Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below; and to use such byproduct material for the purpose (s) and at the place (s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

Licensee 1. Name <b>Veterans Administration Center Radioisotope Service</b> 2. Address <b>Wilshire and Sawtelle Boulevards Los Angeles 25, California</b>		3. License number <b>4-181-7</b> 4. Expiration date <b>March 31, 1959</b> 5. Reference No.
6. Byproduct material (element and mass number)  <b>Carbon 14</b> <b>Carbon 14</b> <b>Carbon 14</b> (See page 2)	7. Chemical and/or physical form  <b>Sodium Bicarbonate</b> <b>Sodium Acetate</b> <b>Glycine</b> (See page 2)	8. Maximum amount of radioactivity which licensee may possess at any one time  <b>1 millicurie</b> <b>1 millicurie</b> <b>1 millicurie</b> (See page 2)

9. Authorized use

**Study rates of turnover and oxidation in muscular dystrophic subjects. Laboratory studies in lower animals.**

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
11. Byproduct materials to be used by, or under the supervision of: **William H. Bland, M.D., Nona Baker, Ph.D.**
12. Human use shall be carried out by, or under the supervision of, **William H. Bland, M.D.**
13. Byproduct material for human use shall be preassayed for quantity and for radiochemical purity. For parenteral administration it shall also be sterilized.
14. **THIS LICENSE SUPERSEDES LICENSE NO. 4-181-5 ISSUED AUGUST 21, 1956 AND AMENDMENT NO. 1 THERETO, ISSUED JANUARY 8, 1957.**
15. **Except as hereinafter provided the licensee shall comply with provisions of the Atomic Energy Commission's Standards for Protection Against Radiation as published in the Federal Register, January 29, 1957 (10-CFR-20).**

For the U. S. Atomic Energy Commission

amend #1988 4/16/57  
Date **March 18, 1957**

*NWC / WTM*

by *Pa/NB 3-22-57*

Director, Isotopes Extension  
Division of Civilian Application  
Oak Ridge, Tennessee

U. S. ATOMIC ENERGY COMMISSION  
BYPRODUCT MATERIAL LICENSE  
Supplementary Sheet

License Number 4-181-7

continued

6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioactivity which licensee may possess at any one time
Carbon 14	Glutamic Acid	1 millicurie
Carbon 14	Glucose	1 millicurie
Carbon 14	Glutamine	1 millicurie
Carbon 14	Lactic Acid-1	1 millicurie
Carbon 14	Lactic Acid-2	1 millicurie

For the U. S. Atomic Energy Commission

Date March 18, 1957

by \_\_\_\_\_

Director, Isotopes Extension  
Division of Civilian Applications  
Oak Ridge, Tennessee

*WMP*

4158 *Wm*

Date Received FEB 18 1957	No. Copies	Application No. 4-181-7
Company Confidential	Expiration Date 3/31/59	Reference No.

Isotope	Form	Possession Limit
C-14	Sodium Bicarbonate	1mc
C-14	Sodium Acetate	1mc
C-14	Glycine	1mc
C-14	Glutamic acid	1mc
C-14	Glucose	1mc
C-14	Glutamine	1mc
C-14	Lactic acid-1	1mc
C-14	Lactic acid-2	1mc

Use:

Study rates of turnover and oxidation in muscular dystrophic subjects. Laboratory studies in lower animals.

APPROVED

MAR 1957

Service Irradiation

*and amend. #1*

*amend #1 JPS 4/16/57*

Special Conditions: (Circle)

- 1. A B C      10. A B C
- 2.                      11.
- 3. omit present      12.
- 4. 4-181-5      13.
- 5. A B C      14.
- 6.                      15.
- 7.                      16.
- 8.                      17. A B
- 9.                      See reverse side

Comments:  
*superseded  
4-181-5*

Letters: *3/18/57*  
*supersedes 4-181-5 +  
amend. #1. Pls return copies  
& verify supplies of new no.  
worn.*

New Application	Yes	<input checked="" type="radio"/> No	SCHA Review	Yes	<input checked="" type="radio"/> No	Childs	
313A Reviewed	<input checked="" type="radio"/> Yes	No	Items Reproduced:			Quimby	
313B Reviewed	Yes	<input checked="" type="radio"/> No				Brown	
Preceptor Statement	<input checked="" type="radio"/> Yes	No				Cooper	
Instrumentation Checked	<input checked="" type="radio"/> Yes	No	Reviewer	Date	Action	Date	Chief
Telephone Call	Yes	<input checked="" type="radio"/> No	<i>WDM</i>	<i>3/7/57</i>	Approve	<i>3-22-57</i>	<i>NB</i>
RSB Files Checked	Yes	<input checked="" type="radio"/> No			Disapprove		
RSB Review	Yes	<input checked="" type="radio"/> No			Cancelled		
					Revised		

*APR 26*