

**RADIOACTIVE MATERIAL LICENSE**

Pursuant to the California Code of Regulations, Division 1, Title 17, Chapter 5, Subchapter 4, Group 2, Licensing of Radioactive Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, use, possess, transfer, or dispose of radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders of the California Department of Public Health now or hereafter in effect and to any standard or specific condition specified in this license.

1. Licensee: Molecular Medicine Research Institute	3. License Number: 6381-43 Amendment Number: 27
2. Address: 428 Oakmead Parkway Sunnyvale, CA 94085	4. Expiration Date: July 9, 2030 (5)
Attention: Jan Rydzewski, Ph.D. Radiation Safety Officer	5. Inspection Agency: Radiologic Health Branch North

License Number 6381-43 is hereby renewed in its entirety.

6. Nuclide	7. Form	8. Possession Limit
A. Hydrogen-3	A. Liquid	A. Total not to exceed 760.0 MBq (20 mCi).
B. Phosphorus-32	B. Liquid	B. Total not to exceed 760.0 MBq (20 mCi).
C. Carbon-14	C. Liquid	C. Total not to exceed 760.0 MBq (20 mCi).
D. Phosphorus-33	D. Liquid	D. Total not to exceed 760.0 MBq (20 mCi).
E. Sulfur-35	E. Liquid	E. Total not to exceed 760.0 MBq (20 mCi).

9. Authorized Use

A. – E. To be used for labeling and as tracers in chemical and biological (*in-vitro* and *in-vivo*) studies.

LICENSE CONDITIONS

10. Radioactive material shall be used only at the following approved location(s):

(a) 428 Mead Parkway, Sunnyvale, CA.

11. This license is subject to an annual fee for sources of radioactive material authorized to be possessed at any one time as specified in Items 6, 7, 8 and 9 of this license. The annual fee for this license is required by and computed in accordance with Title 17, California Code of Regulations, Sections 30230-30232 and is also subject to an annual cost-of-living adjustment pursuant to Section 100425 of the California Health and Safety Code.

12. Radioactive material shall be used by, or under the supervision of, the following individuals:

(a) Jan Rydzewski, Ph. D. (c) Vaishali Chaudhuri, Ph.D. (e) Shruti Yadav  
(b) Ajith Welihinda, Ph.D. (d) James Miller, Ph.D.

13. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 7, 8 and 9 of this license in accordance with the statements, representations, and procedures contained in the documents listed below. The Department's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

**RADIOACTIVE MATERIAL LICENSE**License Number: 6381-43Amendment Number: 27

- (a) The license application, with attachments, dated May 29, 2019, signed by Edward P. Armento, M.D., Executive Director and President, and the letter, with attachments, dated March 24, 2020, signed by Jan Rydzewski, Ph.D., Radiation Safety Officer.
14. (a) The Radiation Safety Officer in this program shall be Jan Rydzewski, Ph.D.  
(b) The Alternate Radiation Safety Officer in this program shall be Ajith Welihinda, Ph.D.
15. This license does not authorize commercial distribution of radioactive material.
16. At least 30 days prior to vacating any address of use listed in Condition 10 of this license, the licensee shall provide written notification of intent to vacate to the California Department of Public Health, in accordance with Title 17, California Code of Regulations, Section 30256 (b). Control of all licensed areas must be maintained until such areas are released by the Department for unrestricted use or the license is terminated, in accordance with Title 17, California Code of Regulations, Section 30256 (j).
17. The licensee is authorized to hold radioactive materials with a physical half-life of less than or equal to 120 days for decay in storage before disposal in ordinary trash provided:
- (a) Radioactive waste to be disposed of in this manner shall be held for decay in storage for at least 10 half-lives.
- (b) Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
- (c) Records shall be maintained of the disposal of licensed materials made by decay in storage. These records shall be sufficient to demonstrate compliance with this license condition and shall be retained for 3 years after the record is made.
18. In accordance with California Health and Safety Code Section 115000.1(h), the licensee shall annually report the radioactive waste inventory held in storage on December 31 of each year and all manifests of Low Level Radioactive Waste (LLRW) shipments to licensed LLRW disposal facilities made during the year to the Department via the online LLRW Tracking System at <https://llrwts.cdph.ca.gov/>.
19. Radioactive materials shall be used by occupational workers in such a manner that the dose limits specified in Title 10, Code of Federal Regulations, Part 20, Subpart C, Sections 20.1201 through 20.1208 are not exceeded.
20. The licensee shall monitor occupational exposures to radiation and shall supply and require the use of individual monitoring devices by personnel as required by Title 10, Code of Federal Regulations, Part 20, Section 20.1502 (a).
21. The licensee shall monitor occupational intakes of radioactive material by, and assess the committed effective dose equivalent to, individuals who may have exceeded or are likely to exceed, the limits specified in Title 10, Code of Federal Regulations, Part 20, Section 20.1502 (b). Suitable and timely measurements used for determination of such internal exposures shall be performed as specified by Section 20.1204.
22. A copy of this license and a copy of all records and documents pertaining to this license shall be maintained available for inspection at 428 Mead Parkway, Sunnyvale, CA.

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Issued for the State of California Department of Public HealthDate: October 7, 2020By: 

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Radiologic Health Branch  
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