[¹²⁵I]-[D-Trp⁶]-LUTEINIZING HORMONE-RELEASING HORMONE

Product Number: NEX365

[¹²⁵I]-[D-Trp⁶]-LH-RH

pGlu-His-Trp-Ser-[¹²⁵I]Tyr-D-Trp-Leu-Arg-Pro-Gly-NH₂

LOT SPECIFIC INFORMATION

CALCULATED AS OF:	11-Nov-2024				
LOT NUMBER:	IZB1340				
SPECIFIC ACTIVITY:	81.4 TBq/mmol 2200 Ci/mmol 56.7 MBq/μg 1532 μCi/μg				

Package Size Information				
Package Size				
as of				
13-Dec-2024				
370 kBq				
10 µCi				
1.85 MBq				
50 μCi				

RADIOCHEMICAL PURIT1 ≥ 95%

MOLECULAR WEIGHT: ~1436.5

PACKAGING: [¹²⁵I]-[D-Trp⁶]-LH-RH is lyophilized from a solution containing 0.04M sodium phosphate, 1M glycine, 0.2M NaCl, 0.25% BSA, 500 KIU/ ml Trasylol[®] at pH 7.2. It is shipped ambient.

STABILITY AND STORAGE: The lyophilized [¹²⁵I]-[D-Trp⁶]-LH-RH should be stored at 4°C or lower. Following reconstitution with distilled water to a concentration of approximately 50 μ Ci/ml on calibration date, aliquot and store at -20°C or lower. Under these conditions the product is stable and usable for at least six weeks after fresh lot date.

SPECIFIC ACTIVITY: The initial specific activity of [¹²⁵I]-[D-Trp⁶]-LH-RH is 2200 Ci/mmol (81.4 TBq/mmol), 1532 µCi/µg (56.7 MBq/µg). Preparative HPLC is used to separate unlabeled luteinizing hormone-releasing hormone from [¹²⁵I]-[D-Trp⁶]-LH-RH. Upon decay, [¹²⁵I]-[D-Trp⁶]-LH-RH undergoes decay catastrophe and the specific activity remains constant with time. However, it is not known what molecular or peptide fragments are generated from the decay event or what functional activity these fragments may have in different assays. References on ¹²⁵I decay and decay catastrophe of ¹²⁵I labeled compounds are available.¹⁻⁵

RADIOCHEMICAL PURITY: Initially greater than 95% radiochemically pure as determined by HPLC.

PREPARATIVE PROCEDURE: [D-Trp⁶]-LH-RH is radioiodinated with no carrier added ¹²⁵I using a modification of the Hunter and Greenwood method⁶ and purified by reversed phase HPLC.

AVAILABILITY: [¹²⁵I]-[D-Trp⁶]-LH-RH is routinely available from stock and is prepared fresh and packaged for shipment on the second Monday of each month. Please inquire for larger package sizes.

APPLICATIONS: [1251]-[D-Trp6]-LH-RH will be useful for receptor binding studies in cell lines and tissue cultures.7-9

HAZARD WARNING: This product contains a chemical (s) known to the state of California to cause cancer. This product also contains a component which is harmful by contact, ingestion or inhalation. It is irritating to the eyes, the skin and the respiratory tract.

RADIATION UNSHIELDED: 280mR/hr/mCi at vial surface.

REFERENCES:

- 1. Doyle, V.M., Buhler, F.R., Burgisser, E., Eur. J. Pharm. 99 353 (1984).
- 2. Schmidt, J., J. Biol. Chem. 259 1660 (1984).
- 3. Loring, R.H., Jones, S.W., Matthews-Bellinger, J., Salpeter, M.M., J. Biol. Chem. 257 1418 (1982).
- 4. Berridge, M.S., Jiang, V.W., Welch, M.J., *Rad. Res.* <u>82</u> 467 (1980).
- 5. Charlton, D.E., *Rad. Res.* <u>107</u> 163 (1986).
- 6. Hunter and Greenwood, F.C., Nature <u>194</u> 495 (1962).
- Emmons, G., Schroder, B., Ortmann, O., Westphalen, S., Schulz, K.D., Schally, A.V., J. Clin. Endocrin. Met. <u>77</u> 1458-64 (1993).
- 8. Srkalovic, G., Bokser, L., Radulovic, S. Kockut, E., Schally, A.V., Endocrinology 127 3052-60 (1990).
- 9. Milovanovic, S.R., Monje, E., Szepeshazi, K., Radulovic, S., Schally, A., *J. Cancer Res. Clin. Oncol.* <u>119</u> 273-8 (1993).

IODINE-125 DECAY CHART HALF LIFE=60 days

Radiations Gamma 35.5 keV (7%), X-ray K alpha 27 KeV (112%), K beta 31 keV (24%)

DAYS	0	2	4	6	8	10	12	14	16	18
0	1	0.977	0.955	0.933	0.912	0.891	0.871	0.851	0.831	0.812
20	0.794	0.776	0.758	0.741	0.724	0.707	0.691	0.675	0.66	0.645
40	0.63	0.616	0.602	0.588	0.574	0.561	0.548	0.536	0.524	0.512
60	0.5	0.489	0.477	0.467	0.456	0.445	0.435	0.425	0.416	0.406
80	0.397	0.388	0.379	0.37	0.362	0.354	0.345	0.338	0.33	0.322
100	0.315	0.308	0.301	0.294	0.287	0.281	0.274	0.268	0.262	0.256
120	0.25	0.244	0.239	0.233	0.228	0.223	0.218	0.213	0.208	0.203

To obtain the correct radioactive concentration or amount for a date before the calibration date: divide by the decay factor corresponding to the number of days before the calibration date. To obtain the correct radioactive concentration or amount for a date after the calibration date: multiply by the decay factor corresponding to the number of days after the calibration date.

The information provided in this document is valid for the specified lot number and date of analysis. This information is for reference purposes only and does not constitute a warranty or guarantee of the product's suitability for any specific use. Revvity, Inc., its subsidiaries, and/or affiliates (collectively, "Revvity") do not assume any liability for any errors or damages arising from the use of this document or the product described herein. REVVITY EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDLESS OF WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, ALLEGEDLY ARISING FROM ANY USAGE OF ANY TRADE OR ANY COURSE OF DEALING, IN CONNECTION WITH THE USE OF INFORMATION CONTAINED HEREIN OR THE PRODUCT ITSELF.



Revvity, Inc. 940 Winter Street Waltham, MA 02451 USA

(800) 762-4000 www.revvity.com For a complete listing of our global offices, visit <u>www.revvity.com</u> Copyright ©2023, Revvity, Inc. All rights reserved.