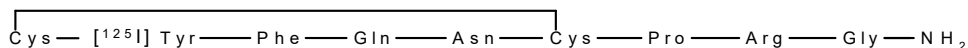


# [<sup>125</sup>I]Arg<sup>8</sup>-Vasopressin

Product Number: NEX128



## LOT SPECIFIC INFORMATION:

CALCULATED AS OF: 8-Jul-2024

LOT NUMBER: BG81640

SPECIFIC ACTIVITY: 81.4 TBq/mmol  
2200 Ci/mmol  
67 MBq/μg  
1821 μCi/μg

RADIOCHEMICAL PURITY: ≥ 95%

MOLECULAR WEIGHT: ~ 1208

**PACKAGING:** [<sup>125</sup>I]Arg<sup>8</sup>-Vasopressin is lyophilized from a solution containing 0.04M sodium phosphate, 1M glycine, 0.2M NaCl, 0.25% BSA, 500 KIU/ml Trasylo<sup>®</sup> at pH 4.2. It is shipped on dry ice..

**STABILITY AND STORAGE:** The lyophilized [<sup>125</sup>I]Arg<sup>8</sup>-vasopressin should be stored at -20°C or lower. Following reconstitution with distilled water to a concentration of approximately 50 μCi/ml on calibration date, aliquot and store at -20°C or lower. Under these conditions the product is stable and usable in radioimmunoassays for at least four weeks after fresh lot date.

**SPECIFIC ACTIVITY:** The initial specific activity of [<sup>125</sup>I]Arg<sup>8</sup>-vasopressin is 2200 Ci/mmol (81 TBq/mmol), 1821 μCi/μg (67 MBq/μg). Preparative HPLC is used to separate vasopressin from [<sup>125</sup>I]Arg<sup>8</sup>-vasopressin. Upon decay, [<sup>125</sup>I]Arg<sup>8</sup>-vasopressin 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 <sup>125</sup>I decay and decay catastrophe of <sup>125</sup>I labeled compounds are available.<sup>1-5</sup>

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

**PREPARATIVE PROCEDURE:** [Arg<sup>8</sup>]-Vasopressin is radioiodinated using no carrier added <sup>125</sup>I, by a modification of the Hunter and Greenwood method <sup>6</sup> and is purified by reversed phase HPLC.

**AVAILABILITY:** [<sup>125</sup>I]Arg<sup>8</sup>-vasopressin 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.

**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 and inhalation. It is irritating to the eyes, skin and respiratory tract and is toxic.

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

## REFERENCES:

1. Dovle, V.M., Buhler, F.R., Buraisser, E., *Eur. J. Pharm.* 99:353 (1984).

## Package Size Information

|                                      |
|--------------------------------------|
| Package Size<br>as of<br>16-Aug-2024 |
| 370 kBq<br>10 μCi                    |
| 1.85 MBq<br>50 μCi                   |

1. Doyle, V.M., Dunbar, P.R., Dargatzis, L., *Endocrinology* 99 666 (1987).
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.* 82 467 (1980).
5. Charlton, D.E., *Rad. Res.* 107 163 (1986).
6. Hunter, W.M. and Greenwood, F.C., *Nature* 194, 495 (1962).

## 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   |
|------------|-------|------|------|------|------|------|------|------|------|------|
| <b>0</b>   | 1.000 | .977 | .955 | .933 | .912 | .891 | .871 | .851 | .831 | .812 |
| <b>20</b>  | .794  | .776 | .758 | .741 | .724 | .707 | .691 | .675 | .660 | .645 |
| <b>40</b>  | .630  | .616 | .602 | .588 | .574 | .561 | .548 | .536 | .524 | .512 |
| <b>60</b>  | .500  | .489 | .477 | .467 | .456 | .445 | .435 | .425 | .416 | .406 |
| <b>80</b>  | .397  | .388 | .379 | .370 | .362 | .354 | .345 | .338 | .330 | .322 |
| <b>100</b> | .315  | .308 | .301 | .294 | .287 | .281 | .274 | .268 | .262 | .256 |
| <b>120</b> | .250  | .244 | .239 | .233 | .228 | .223 | .218 | .213 | .208 | .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 [www.revvity.com](http://www.revvity.com)  
Copyright ©2023, Revvity, Inc. All rights reserved.