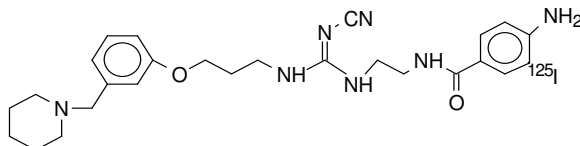


**TECHNICAL  
DATA  
SHEET** $^{125}\text{I}$ 

Caution: For Laboratory Use. A product for research purposes only.

**[ $^{125}\text{I}$ ] AMINOPOTENTIDINE****Product Number: NEX431****LOT SPECIFIC INFORMATION****CALCULATED AS OF:** 15-Jun-2020**LOT NUMBER:** LN72400**SPECIFIC ACTIVITY:**  
81.4 TBq/mmol  
2200 Ci/mmol  
135 MBq/ $\mu\text{g}$   
3657  $\mu\text{Ci}/\mu\text{g}$ **CONCENTRATION:**  
6.4 MBq/ml  
173.9  $\mu\text{Ci}/\text{ml}$ **RADIOCHEMICAL PURITY:** >95%**MOLECULAR WEIGHT:** 601.6**Package Size Information**

Package Size as of 24-Jul-2020	Volume
370 kBq 10 $\mu\text{Ci}$	0.10 mL
925 kBq 25 $\mu\text{Ci}$	0.25 mL
92.5 MBq 250 $\mu\text{Ci}$	2.5 mL

**PACKAGING:** [ $^{125}\text{I}$ ]-Aminopotentidine is supplied in an ethanol and water solution and dispensed in TPX vials. It is shipped ambient.**STABILITY AND STORAGE:** [ $^{125}\text{I}$ ]-Aminopotentidine should be stored at 2-8°C. Under these conditions the product has been shown to be stable for at least four weeks after the fresh lot date.**SPECIFIC ACTIVITY:** The initial specific activity is 2200 Ci/mmol, (81.4 TBq/mmol), 3657  $\mu\text{Ci}/\mu\text{g}$  (135 MBq/ $\mu\text{g}$ ). Upon decay, the product undergoes decay catastrophe and the specific activity remains constant with time. However, it is not known what molecular fragments are generated from the decay event or what functional activity these fragments may have in different assays. References on  $^{125}\text{I}$  decay and decay catastrophe of  $^{125}\text{I}$  labeled compounds are available.<sup>1-5</sup>**RADIOCHEMICAL PURITY:** Initially greater than 95% radiochemically pure as determined by HPLC.**PREPARATIVE PROCEDURE:** [ $^{125}\text{I}$ ]-Aminopotentidine is radioiodinated with no carrier added  $^{125}\text{I}$  using a modification of the Hunter and Greenwood method<sup>6</sup> (chloramine-T) and purified by reversed phase HPLC.

**AVAILABILITY:** [<sup>125</sup>I]-Aminopotentidine is routinely available from stock and is prepared fresh and packaged for shipment on the third Monday of each month. Please inquire for larger package sizes.

**APPLICATIONS:** [<sup>125</sup>I]-Aminopotentidine has been shown to work in receptor binding and autoradiography and is an antagonist for histamine (H<sub>2</sub>) receptors.<sup>7</sup>

**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. Doyle, V.M., Buhler, F.R., Burgisser, E., *Eur. J. Pharm.* **99** 353 (1984).
2. Schmidt, J., *J. Biol. Chem.* **259** 1160 (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).
7. Ruat, M., Traiffort, E., et al, *Proc. Natl. Acad. Sci. USA*, Vol 87, p.1658 March 1990

## 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
0	1	0.977	0.955	0.933	0.912	0.891	0.871	0.851	0.831
20	0.794	0.776	0.758	0.741	0.724	0.707	0.691	0.675	0.66
40	0.63	0.616	0.602	0.588	0.574	0.561	0.548	0.536	0.524
60	0.5	0.489	0.477	0.467	0.456	0.445	0.435	0.425	0.416
80	0.397	0.388	0.379	0.37	0.362	0.354	0.345	0.338	0.33
100	0.315	0.308	0.301	0.294	0.287	0.281	0.274	0.268	0.262
120	0.25	0.244	0.239	0.233	0.228	0.223	0.218	0.213	0.208

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.

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