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

[¹²⁵I] AMINOPOTENTIDINE

Product Number: NEX431



LOT SPECIFIC INFORMATION

TECHNICAL DATA SHEET

			Package Size Information		
			Package Size		
CALCULATED AS OF:		17-Jun-2019	as of	Volume	
			19-Jul-2019		
LOT NUMBER:		LN71990	370 kBq	0.10 mL	
			10 µCi		
SPECIFIC ACTIVITY:	81.4	TBq/mmol	925 kBq	0.25 mL	
	2200	Ci/mmol	25 μCi		
	135	δ MBq/μg	92.5 MBq	2.5 mL	
	3657	′μCi/μg	250 μCi		
CONCENTRATION					
CONCENTRATION:	6.1	MBq/ml			
	163.9	μCi/ml			
RADIOCHEMICAL PURITY	:	>95%			
MOLECULAR WEIGHT:	601.6				

PACKAGING: [¹²⁵I]-Aminopotentidine is supplied in an ethanol and water solution and dispensed in TPX vials. It is shipped ambient.

STABILITY AND STORAGE: [¹²⁵I]-Aminopotentidine should be stored at 2-8°C. Under these conditions the product has been shown to 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 μ Ci/ μ g (135 MBq/ μ 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 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: [¹²⁵I]-Aminopotentidine is radioiodinated with no carrier added ¹²⁵I using a modification of the Hunter and Greenwood method⁶ (chloramine-T) and purified by reversed phase HPLC.

AVAILABILITY: [¹²⁵I]-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: $[^{125}I]$ -Aminopotentidine has been shown to work in receptor binding and autoradiography and is an antagonist for histamine (H₂) receptors.⁷

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. <u>99</u> 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. <u>107</u> 163 (1986).
- 6. Hunter, W.M. and Greenwood, F.C., *Nature* <u>194</u> 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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