[^{125}I]-Peptide YY, (Human)

[^{125}I]-PYY

Tyr-Pro-Ile-Lys-Pro-Glu-Ala-Pro-Gly-Glu-Asp-Ala-Ser-Pro-Glu-Glu-Leu-Asn-Arg-Tyr Tyr-Ala-Ser-Leu-Arg-His-Tyr-Leu-Asn-Leu-Val-Thr-Arg-Gln-Arg-Tyr-NH_2

Product Number: NEX341

LOT SPECIFIC INFORMATION

CALCULATED AS OF: 4-Nov-2024

LOT NUMBER: HXB0640

SPECIFIC ACTIVITY:
81.4 TBq/mmol
2200 Ci/mmol
18 MBq/µg
496 µCi/µg

CONCENTRATION:
2.9 MBq/ml
78.0 µCi/ml

RADIOCHEMICAL PURITY: ≥ 95%

MOLECULAR WEIGHT: 4432.17

Package Size Information

Package Size as of 6-Dec-2024	Volume
370 kBq 10 µCi	0.20 mL
1.85 MBq 50 µCi	1.00 mL

PACKAGING: [^{125}I]-PYY (human) is in 0.05M sodium phosphate, 1.0% BSA, pH 7.4. It is shipped on dry ice.

STABILITY AND STORAGE: [^{125}I]-PYY (human) should be stored at -20ºC. 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 [^{125}I]-PYY (human) is 2200 Ci/mmole (81 TBq/mmole), 496 µCi/µg (18 MBq/µg). Preparative HPLC is used to separate unlabeled PYY (human) from [^{125}I]-PYY (human). Upon decay, [^{125}I]-PYY (human) 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 ^{125}I decay and decay catastrophe of ^{125}I labeled compounds are available.[1-5]

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

PREPARATIVE PROCEDURE: Human peptide YY is radioiodinated with no carrier added ^{125}I using a modification of the Hunter and Greenwood method[6] and purified by reversed phase HPLC. This method predominantly labels tyrosine residues.

AVAILABILITY: [^{125}I]-PYY (human) is routinely available from stock and is prepared fresh and packaged for shipment on the first Monday of each month. Please inquire for larger package sizes.

APPLICATIONS: [^{125}I]-Peptide YY (human) will be useful for characterizing Peptide YY receptors.[7-10]

HAZARD WARNING: This product contains a chemical (s) known to the state of California to cause cancer.
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., *Radiation Research* 82 467 (1980).
5. Charlton, D.E., *Radiation Research* 107 163 (1986).
6. Hunter, W.M. and Greenwood, F.C., *Nature* 194 495 (1962).
7. Miller, R.J., *J. Med. Chem.* 27 1239 (1984).
8. Walker, M.W., Miller, R.J., *Mol. Pharmacol.*, 34 779-792 (1988).
9. Sheikh, S.P., O'Hare, M.M.T., Tortora, O., Schwartz, T.W., *J. Biol. Chem.* 264 6648-6654 (1989).
10. Wahlestedt, C., Regunathan, S., Reis, D. J., *Life Sci*., 50 PL7-PL12 (1992).

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	1.000	.977	.955	.933	.912	.891	.871	.851	.831	.812
20	.794	.776	.758	.741	.724	.707	.691	.675	.660	.645
40	.630	.616	.602	.588	.574	.561	.548	.536	.524	.512
60	.500	.489	.477	.467	.456	.445	.435	.425	.416	.406
80	.397	.388	.379	.370	.362	.354	.345	.338	.330	.322
100	.315	.308	.301	.294	.287	.281	.274	.268	.262	.256
120	.250	.244	.239	.233	.228	.223	.218	.213	.208	.203

/ 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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