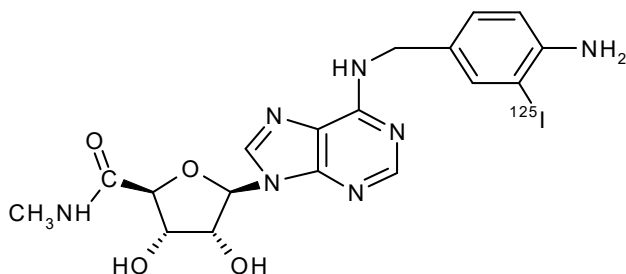


[¹²⁵I]-4-AMINOBENZYL-5'-N-METHYLCARBOXAMINDEOADENOSINE

Product Number: NEX312

[¹²⁵I]-AB-MECA



LOT SPECIFIC INFORMATION

CALCULATED AS OF: 14-Oct-2024

LOT NUMBER: GUA1540

SPECIFIC ACTIVITY: 81.4 TBq/mmol
2200 Ci/mmol
156 MBq/μg
4207 μCi/μg

CONCENTRATION: 6.30 MBq/ml
170.2 μCi/ml

RADIOCHEMICAL PURITY ≥ 95%

MOLECULAR WEIGHT: 523

PACKAGING: [¹²⁵I]-AB-MECA is in methanol (may contain up to 2% acetonitrile from the purification process). It is shipped ambient.

STABILITY AND STORAGE: [¹²⁵I]-AB-MECA should be stored at 4°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]-AB-MECA is 2200 Ci/mmol, (81 TBq/mmol), 4207 μCi/μg (156 MBq/μg). Preparative HPLC separates unlabeled AB-MECA from [¹²⁵I]-AB-MECA. Upon decay, [¹²⁵I]-AB-MECA 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: AB-MECA is radioiodinated with no carrier added ¹²⁵I using a modification of the Hunter and Greenwood method⁶ and is purified by reversed phase HPLC.

AVAILABILITY: [¹²⁵I]-AB-MECA is routinely available from stock and is prepared fresh and packaged for shipment

Package Size Information

| Package Size as of 15-Nov-2024 | Volume |
|--------------------------------|----------|
| 370 kBq 10 μCi | 0.100 mL |
| 1.85 MBq 50 μCi | 0.500 mL |

AVAILABILITY: ¹²⁵I-AB-MECA 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: Agonist ¹²⁵I-AB-MECA binds strongly to cloned, human A₃AR (type 3 adenosine receptors); K_d=0.59.^{7,8} However, ¹²⁵I-AB-MECA lacks high selectivity for A₃AR, so blocking agents for A₁AR (type 1 adenosine receptors) may greatly improve autoradiography results. A₃AR ligand

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 or ingestion. It is irritating to the eyes and skin. It is toxic and flammable. The target organs are the eyes, the central nervous system, the kidneys and the liver.

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

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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 | 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 | 0.660 | 0.645 |
| 40 | 0.630 | 0.616 | 0.602 | 0.588 | 0.574 | 0.561 | 0.548 | 0.536 | 0.524 | 0.512 |
| 60 | 0.500 | 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 | 0.370 | 0.362 | 0.354 | 0.345 | 0.338 | 0.330 | 0.322 |
| 100 | 0.315 | 0.308 | 0.301 | 0.294 | 0.287 | 0.281 | 0.274 | 0.268 | 0.262 | 0.256 |
| 120 | 0.250 | 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.

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