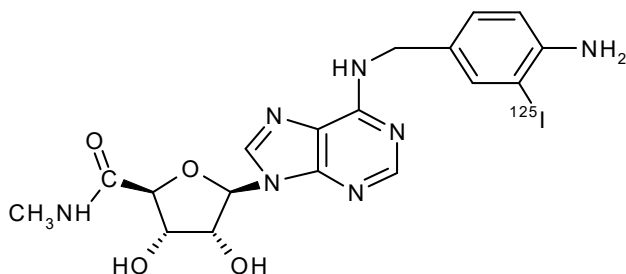


**[<sup>125</sup>I]-4-AMINOBENZYL-5'-N-METHYLCARBOXAMINDEOADENOSINE**

Product Number: NEX312

**[<sup>125</sup>I]-AB-MECA****LOT SPECIFIC INFORMATION**

CALCULATED AS OF: 11-Dec-2023

LOT NUMBER: GU11240

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

CONCENTRATION: 6.40 MBq/ml  
 172.8 μCi/ml

RADIOCHEMICAL PURITY ≥ 95%

MOLECULAR WEIGHT: 523

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

**STABILITY AND STORAGE:** [<sup>125</sup>I]-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 [<sup>125</sup>I]-AB-MECA is 2200 Ci/mmol, (81 TBq/mmol), 4207 μCi/μg (156 MBq/μg). Preparative HPLC separates unlabeled AB-MECA from [<sup>125</sup>I]-AB-MECA. Upon decay, [<sup>125</sup>I]-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 <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:** AB-MECA is radioiodinated with no carrier added <sup>125</sup>I using a modification of the Hunter and Greenwood method<sup>6</sup> and is purified by reversed phase HPLC.

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

**Package Size Information**

Package Size as of 12-Jan-2024	Volume
370 kBq 10 μCi	0.100 mL
1.85 MBq 50 μCi	0.500 mL

**AVAILABILITY:** <sup>125</sup>I-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 <sup>125</sup>I-AB-MECA binds strongly to cloned, human A<sub>3</sub>AR (type 3 adenosine receptors); K<sub>d</sub>=0.59.<sup>7,8</sup> However, <sup>125</sup>I-AB-MECA lacks high selectivity for A<sub>3</sub>AR, so blocking agents for A<sub>1</sub>AR (type 1 adenosine receptors) may greatly improve autoradiography results. A<sub>3</sub>AR 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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10. Barrington, W.W., Jacobson, K.A., Hutchinson, A.J., Williams, M., Stiles, G.L., *Proc. Nat'l. Acad. Sci. USA* **86** 1111-1115 (1989).

## 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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