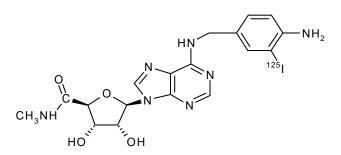
# [<sup>125</sup>I]-4-AMINOBENZYL-5'-N-METHYLCARBOXAMINDEOADENOSINE

Product Number: NEX312

## [<sup>125</sup>I]-AB-MECA



#### LOT SPECIFIC INFORMATION

CALCULATED AS OF:	12-May-2025				
LOT NUMBER:	GU61350				
SPECIFIC ACTIVITY:	81.4 TBq/mmol 2200 Ci/mmol 156 MBq/μg 4207 μCi/μg				
CONCENTRATION:	6.35 MBq/ml 171.7 μCi/ml				

Package Size Information						
Package Size						
as of	Volume					
13-Jun-2025						
370 kBq						
10 µCi	0.100 mL					
1.85 MBq						
50 μCi	0.500 mL					

RADIOCHEMICAL PURIT ≥ 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.

AVAII ARII ITY: [1251]-AR-MECA is routinely available for shipment. Revvity Proprietary Information 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):  $K_d=0.59$ .<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.

#### **REFERENCES:**

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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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Revvity, Inc. 940 Winter Street Waltham, MA 02451 USA

(800) 762-4000 www.revvity.com

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