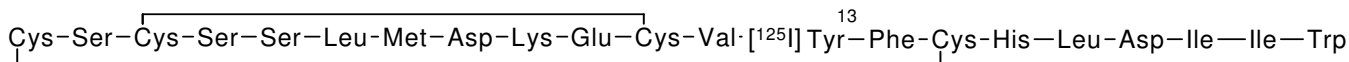


Caution: For Laboratory Use. A product for research purposes only.

## [<sup>125</sup>I]TYR<sup>13</sup>-ENDOTHELIN-1(HUMAN, PORCINE)

Product Number: NEX259

### [<sup>125</sup>I]-ET-1



### LOT SPECIFIC INFORMATION

CALCULATED AS OF: 1-Sep-2014

LOT NUMBER: ER01040

SPECIFIC ACTIVITY: 81.4 TBq/mmol  
2200 Ci/mmol  
31.1 MBq/μg  
841 μCi/μg

CONCENTRATION: 3.33 MBq/ml  
90.1 μCi/ml

RADIOCHEMICAL PURITY: ≥ 95%

### Package Size Information

Package Size as of 10-Oct-2014	Volume
185 kBq 5 μCi	0.10 ml
370 kBq 10 μCi	0.20 ml
1.85 MBq 50 μCi	1.00 ml

MOLECULAR WEIGHT: ~2,616

**PACKAGING:** [<sup>125</sup>I]-ET-1 is in a solution containing 0.08M Tris HCl, 0.08M NaCl, 50 KIU/ml Trasylol®, and a stabilizer (pH 8.6): n-propanol, 1:1. It is shipped on dry ice in silanized vials.

**STABILITY AND STORAGE:** [<sup>125</sup>I]-ET-1 should be stored at -20°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]-ET-1 is 2200 Ci/mmol, (81 TBq/mmol), 841μCi/μg (31.1 MBq/μg). Preparative HPLC is used to separate unlabeled endothelin from [<sup>125</sup>I]-ET-1. Upon decay, [<sup>125</sup>I]-ET-1 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:** Synthetic endothelin-1 is radioiodinated using no carrier added <sup>125</sup>I by a lactoperoxidase procedure and purified by HPLC. Amino acid analysis indicates that this product is labeled exclusively on Tyr<sup>13</sup>.

**AVAILABILITY:** [<sup>125</sup>I]-ET-1 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:** [<sup>125</sup>I]-ET-1 will be useful as a tracer in RIA's for endothelin, and as a high specific activity ligand in receptor studies encompassing the areas of vasoconstriction and stroke, smooth muscle and renal function, and in the study of neurotransmitters in the CNS (see references 6-17).

**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, is toxic and flammable. Target organs are the central nervous system, respiratory system, kidneys and 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	.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

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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