[^{125}I]-MARCROPHAGE INFLAMMATORY PROTEIN-1α (HUMAN, RECOMBINANT) CCL3

Product Number: NEX298

LOT SPECIFIC INFORMATION

CALCULATED AS OF: 11-Mar-2024

LOT NUMBER: GG41240

SPECIFIC ACTIVITY:

81.4	TBq/mmol
2200	Ci/mmol
10.2	MBq/µg
275	µCi/µg

Package Size Information

Package Size as of 12-Apr-2024
185 kBq 5 µCi
925 kBq 25 µCi

RADIOCHEMICAL PURITY: ≥ 95% by HPLC

MOLECULAR WEIGHT: ~8000

PACKAGING: [^{125}I]-MIP-1α is lyophilized from a solution containing 0.05M sodium acetate, 5% sucrose, 0.25% BSA, and a stabilizer, at pH 4.0-4.2. It is shipped ambient in a TPX3 vial.

STABILITY AND STORAGE: The lyophilized [^{125}I]-MIP-1α should be stored at 4°C or lower. Following reconstitution with distilled water to a concentration of approximately 25 µCi/ml on calibration date, aliquot and store at -20°C. Under these conditions the product is stable and usable in radioimmunoassays and receptor assays for at least six weeks after fresh lot date.

SPECIAL INFORMATION: [^{125}I]-MIP-1α sticks to glass. We recommend using plasticware or Sigma-Cote™ treated glassware to minimize this problem.

SPECIFIC ACTIVITY: The initial specific activity of [^{125}I]-MIP-1α is 2200 Ci/mmol (81 TBq/mmol), 275 µCi/µg (10 MBq/µg). Preparative HPLC separates unlabeled MIP-1α from [^{125}I]-MIP-1α. Upon decay, [^{125}I]-MIP-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 ^{125}I decay and decay catastrophe of ^{125}I labeled compounds .

PREPARATIVE PROCEDURE: MIP-1α (human, recombinant), obtained from PeproTech, Inc., Rocky Hill NJ, is radioiodinated with no carrier added ^{125}I using a lactoperoxidase procedure and is purified by reversed phase HPLC. This method predominantly labels tyrosine residues.

AVAILABILITY: [^{125}I]-MIP-1α 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: [^{125}I]-MIP-1α is useful in RIA, receptor studies and crosslinking experiments in the research into immune regulation.[6-13]

Immune regulation.

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 and is toxic.

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

REFERENCES:

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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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