

[¹²⁵I]-Human Growth Hormone

[¹²⁵I]-HGH

Product Number: NEX100

LOT SPECIFIC INFORMATION:

CALCULATED AS OF: 25-Nov-2024

LOT NUMBER: AHB2740

SPECIFIC ACTIVITY:

92.2	TBq/mmol
2492.3	Ci/mmol
4.3	MBq/μg
116	μCi/μg

CONCENTRATION:

3.2	MBq/ml
85.9	μCi/ml

RADIOCHEMICAL PURITY: >95%

MOLECULAR WEIGHT: ~21,500

Package Size Information

Package Size as of 27-Dec-2024	Volume
370 kBq 10 μCi	0.20 ml
1.85 MBq 50 μCi	1.00 ml

PACKAGING: [¹²⁵I]-HGH is in a solution containing 0.04M sodium phosphate, 1M glycine, 0.2M NaCl, 0.25% BSA, 500 KIU/ml Trasylol® at pH 7.2. It is shipped on dry ice.

STABILITY AND STORAGE: [¹²⁵I]-HGH should be stored at -20°C or lower. It should be aliquoted in appropriate volumes to avoid repeated freeze-thaw cycles. Under these conditions, the product is stable and usable in radioimmunoassays for at least four weeks after fresh lot date.

SPECIFIC ACTIVITY: 85-130 μCi/μg (3.1-4.8 MBq/μg) on fresh lot date as determined from ¹²⁵I incorporation into human growth hormone. Specific activity decays with time.

RADIOCHEMICAL PURITY: Initially less than 5% unbound iodide as determined by thin layer chromatography.

PREPARATIVE PROCEDURE: Human growth hormone is radioiodinated with no carrier added ¹²⁵I using a modification of the Hunter and Greenwood method¹ and purified by gel filtration chromatography. This method predominantly labels tyrosine residues.

AVAILABILITY: [¹²⁵I]-HGH is routinely available from stock and is prepared fresh and packaged for shipment on the fourth Monday of each month. Please inquire for larger package sizes.

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

REFERENCE:

1. Hunter, W.M. and Greenwood, F.C. *Nature* 1962, 194, 495 (1962)
NEX100-R-REV01

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.

The information provided in this document is valid for the specified lot number and date of analysis. This information is for reference purposes only and does not constitute a warranty or guarantee of the product's suitability for any specific use. Revvity, Inc., its subsidiaries, and/or affiliates (collectively, "Revvity") do not assume any liability for any errors or damages arising from the use of this document or the product described herein. REVVITY EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDLESS OF WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, ALLEGEDLY ARISING FROM ANY USAGE OF ANY TRADE OR ANY COURSE OF DEALING, IN CONNECTION WITH THE USE OF INFORMATION CONTAINED HEREIN OR THE PRODUCT ITSELF.



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

(800) 762-4000
www.revvity.com

For a complete listing of our global offices, visit www.revvity.com
Copyright ©2023, Revvity, Inc. All rights reserved.