

Fact Sheet: Kryptoscan™: ⁸¹Rb/^{81m}Kr Generator

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⁸¹Rb/^{81m}Kr Generator

- Half-Life (of ⁸¹Rb): 4.57 hours)

KryptoScan™ is a radionuclide generator. The mother-radionuclide (Rubidium-81) is immobilized on a membrane, through which the daughter radionuclide (krypton-81m) is eluted with the passing of air.

Krypton-81m is ideally suited for lung ventilation studies. Its very short half-life results in a low radiation burden for the patient. With a gamma energy higher than that of ^{99m}Tc, it enables lung ventilation studies to be performed immediately after a perfusion study of the pulmonary vascular bed.

Product Specification

Pharmaceutical form

Radionuclidic generator

Available quantities

75 - 740 MBq per generator at calibration

Expiry

20 hours from time of calibration

Radionuclide purity

⁸¹Rb breakthrough:
<50 Bq/GBq/L ^{81m}Kr

Packaging

Radionuclidic generator

Availability

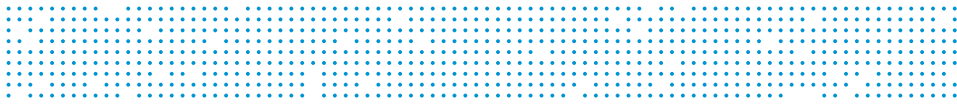
Dispensed daily

Calibration

12:00 p.m. CET at day after production

Delivery Service

Covidien is our partner in the distribution of our ⁸¹Rb/^{81m}Kr generators. In Covidien we found an established global healthcare company that offers us effective logistic solutions for distributing our products outside the Benelux region. Their international presence, with products sold in over 140 countries, supports the compliance of our strict quality and safety requirements when it comes to shipping overseas.



Physical Data (^{81m}Kr)

Physical half-life: 13.1 seconds

Rad. Type	Energy (keV)	Radiation Intensity (%)
G	190.46	67.7

Decay Table (⁸¹Rb)

Physical half-life: 4.576 hours

Rubidium-81 is in equilibrium with krypton-81m

Hours	0	1	2	3	4	5	6	7	8	9
0	1.000	0.859	0.739	0.635	0.546	0.469	0.403	0.346	0.298	0.256
10	0.220	0.189	0.162	0.140	0.120	0.103	0.089	0.076	0.065	0.056
20	0.048	0.042	0.036	0.031	0.026	0.023	0.019	0.017	0.014	0.012

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