

81mKrypton

Krypton [⁸¹Rb/^{81m}Kr]-generator

1. Indications

^{81m}Kr injection is approved for analyzing the lung ventilation. Because of the low radioactive doses the product can be used by children in particular. It is also used in combination with lung perfusion scintigraphy to diagnose lung emboli.

2. Preparation

Approved product, see summary of product characteristics (SmPC).

3. Quality control

Approved product, see summary of product characteristics (SmPC) and the European Pharmacopeia.

4. Interactions

Diazepam in sedating dose and anesthetics in general can have influence on the distribution of radioactive gases. They lead to replace the radioactivity to the lung top and to reduce the basic accumulation.

5. Adverse events

No product specific adverse events are reported or observed yet.

6. Biodistribution & pharmacokinetics

^{81m}Kr is a noble gas with a short biological half life. Because of the fast decay the effective elimination half life through the lung is about 13 sec. The periphery activity of Krypton will be excreted by breathing after the first passage.

7. Stability

The product has a shelf life of 12 h after the calibration time, mentioned on the etiquette. It has to be stored below 25°C, do not freeze.

8. Literature

- SmPC Krypton [81Rb/81mKr]-generator GE Healthcare.