

Contents

1. Description

1.1 Background information

1.2 Applications

1.3 Physico-chemical properties

1.4 Requirements

2. Protocol

2.1 Preparation

2.2 Injection

2.3 Imaging

3. References

4. Related products

1.2 Applications

ExiTron P is indicated for use in CT of small animals, for example mice, to facilitate the visualization of the vasculature. Examples include contrast-enhanced angiography.

1.3 Physico-chemical properties

Mean hydrodynamic diameter: 290 nm.

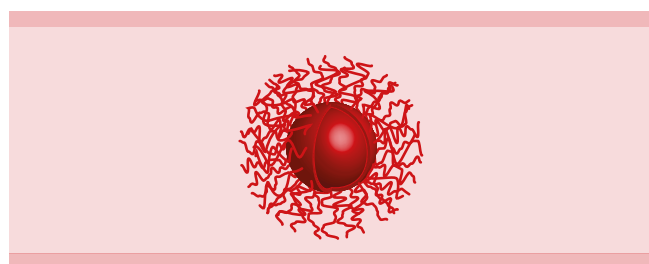


Figure 1: Schematic diagram of an ExiTron P polymeric capsule.

1.4 Requirements

☞ Sterile syringes and needles (27–30 G)

Note: To allow sufficient volume for 5 x 100 µL injections per vial, the syringe/needle dead volume should be kept below 70 µL.

Tip: Use insulin or tuberculin syringes.

☞ 70 % ethanol

☞ Sterile water for injection (WFI).

1. Description

Components 850 µL ExiTron™ P,
CT contrast agent
or
5 x 850 µL ExiTron™ P,
CT contrast agent.

Capacity 5 x 100 µL injections after reconstitution
or
25 x 100 µL injections after reconstitution.

Product format ExiTron P is supplied as a sterile isotonic suspension containing 200 mg iodine per mL.

Appearance Opaque white liquid.

Storage Store protected from light at 2–8 °C. Do not freeze. The expiration date is indicated on the vial label.

For laboratory and animal research use only. **Warning: Not for human or animal therapeutic or diagnostic use. Make sure to comply with all laws and regulations governing research on animals.**

1.1 Background information

ExiTron P is an iodine-based contrast agent based on polymeric capsules specifically formulated for pre-clinical computed tomography (CT).

Upon intravenous injection, ExiTron P circulates in the blood stream for a prolonged time. Significant extravasation can be observed in fenestrated blood vessels of inflamed tissue or tumors. ExiTron P is excreted via glomerular filtration (kidneys) as well as through the hepatobiliary pathway.

2. Protocol

2.1 Preparation

☞ Read the entire protocol before starting.

Tip: For optimum device settings perform initial studies in a suitable imaging phantom.

☞ The contrast agent is ready for injection as provided.

☞ For a mouse weighing 20–30 g the typical injection volume is 100 µL corresponding to a dose of 800 mg iodine/kg body weight (for a 25 g mouse).

Note: Standard animal-handling procedures and local regulations must be followed.

2.2 Injection

- 🌀 Vortex the vial to ensure thorough mixing.
- 🌀 Disinfect the septum with 70% ethanol. Let septum dry.
- 🌀 Warm the mouse tail to dilate the veins and enhance their visibility.
- 🌀 Inject ExiTron P (typically 100 µL) via the lateral tail vein of the mouse.

Note: ExiTron P contains no preservatives. Avoid microbial contamination and discard any unused material after 24 hours.

2.3 Imaging

- 🌀 Follow the imaging protocol as recommended by the manufacturer of your imaging system.
- 🌀 Taking a pre-contrast image is recommended.
- 🌀 Begin imaging immediately after injection.

Find examples of ExiTron P-enhanced CT images at www.viscover.berlin.

3. References

1. Koziolok, E. *et al.* (2022) *In vivo* renal imaging in mice via contrast-enhanced CT using a novel polymeric contrast agent.
<https://www.viscover-online.de/data-gallery/ct/>.

4. Related products

ExiTron™ U	# 130-095-142, # 130-095-143
ExiTron™ V	# 130-095-283, # 130-095-284
ExiTron™ nano 6000	# 130-095-146, # 130-095-147
ExiTron™ nano 12000	# 130-095-698, # 130-095-700
ExiTron™ MyoC 8000	# 130-095-701, # 130-095-702
ExiTron™ ultra 18000	# 130-095-709, # 130-095-710
ExiTron™ BAT	# 130-095-707, # 130-095-708

A comprehensive product portfolio for the imaging modalities MRI, CT, US, OI, SPECT, and PET is available at www.viscover.berlin.

Warranty

The products sold hereunder are warranted only to be free from defects in workmanship and material at the time of delivery to the customer. *nanoPET Pharma GmbH* makes no warranty or representation, either expressed or implied, with respect to the fitness of a product for a particular purpose. There are no warranties, expressed or implied, which extend beyond the technical specifications of the products. *nanoPET Pharma GmbH's* liability is limited to either replacement of the products or refund of the purchase price. *nanoPET Pharma GmbH* is not liable for any property damage, personal injury or economic loss caused by the product.

Unless otherwise specifically indicated, all *nanoPET Pharma* products and services are for research use only and not for diagnostic or therapeutic use.

ExiTron and Viscover are trademarks of *nanoPET Pharma GmbH*.
Manufacturer: *nanoPET Pharma GmbH*, Berlin, Germany.

Copyright © 2023 *nanoPET Pharma GmbH*. All rights reserved.