AuroVist^m 1.9mm

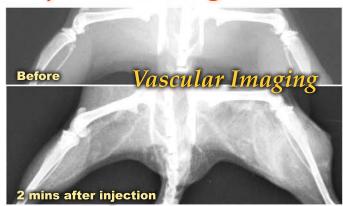
1.9 nm Gold Nanoparticle X-ray Contrast Agent

Features and Advantages

- Low toxicity (LD50 >1.4 g Au/kg) Biocompatible!
- · Low osmolality even at high concentrations
- Low viscosity: inject even into small vessels
- Longer blood residence than iodine
 Biphasic blood clearance:
 Fast component: t_{1/2} ~10 min, Slow: t_{1/2} ~1.5 hrs
- Excellent for imaging with microCT
- 1.9 nm gold core, ~50,000 Da
- Small gold nanoparticles clear through kidneys
- Highest kidney contrast agent available

Preparations

1102 AuroVist™ 1.9 nm 40 mg Au 1102A AuroVist™ 1.9 nm 5 x 40 mg



X-ray of mouse hind legs in vivo and AuroVist™ 1.9nm injection. Leg on right side of image has a subcutaneous tumor, showing increased vascular gold.**

Applications

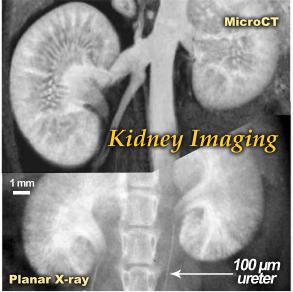
- See functioning kidneys in live animals!
- · In vivo (virtual) vascular casting
- Used in cell-radiation studies
- Material science & nanoparticle studies

10 mins

60 mins

A new contrast agent for microCT and CT research

Highly stable and soluble, non-toxic, non-viscous: Gold nanoparticles with a biocompatible shell.



Kidneys in live mouse after IV injection of AuroVist™ 1.9nm.
Kidney function is visualized as small gold nanoparticles are filtered from the blood, passing through glomeruli, tubules and into ureters.**

See the difference!

before

injection after injection aft

2 mins

standard iodine agent (Omnipaque®) a b c d

AuroVist™ shows low liver and spleen uptake, and clearance via kidneys and bladder (f-h). At 60 min. (h), contrast in the AuroVist™ mouse is similar to the uninjected mouse (e), indicating efficient clearance.**



Tel: 631-205-9490 Fax: 631-205-9493

US toll free: 877-447-6266

Questions? Ask our scientists: tech@nanoprobes.com