



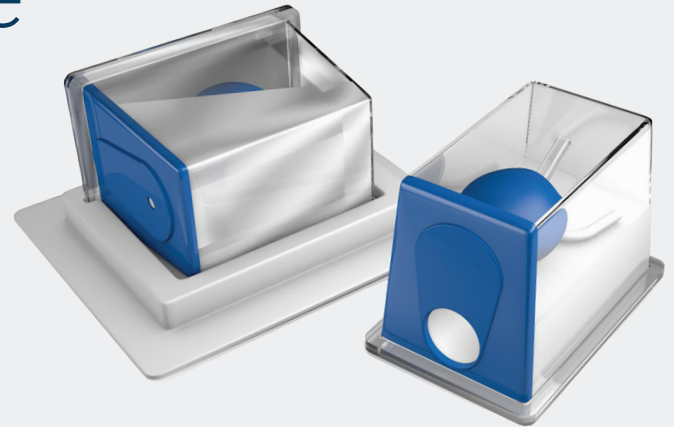
SUN NUCLEAR

A MIRION MEDICAL COMPANY

Tissue Equivalent Ultrasound Prostate Phantoms

053S, 053L, 053L-EF

- Supports training and demonstration of prostate applications
- Enables biopsy, brachytherapy, and cryosurgery use cases
- Provides visual reference of needle or device placement



The Tissue Equivalent Ultrasound Prostate Phantoms are disposable, multimodality training tools for practicing procedures involving transrectal prostate imaging. They support realistic training with rectal ultrasound probes and interventional devices commonly used in prostate procedures.

The gel formulations help minimize needle tracking while providing imaging contrast across CT, MRI, ultrasound, and elastography modalities. The prostate, urethra, rectal wall, and seminal vesicles are housed within a clear acrylic enclosure.

A 3-mm perineal membrane allows insertion of a wide range of surgical instruments, enabling realistic practice for ultrasound-guided cryosurgery, radioactive seed implantation, and needle biopsy procedures.

The phantom is available with embedded lesions (053L) or without lesions (053S) and can be ordered in either a standard side-fire configuration or an alternative design optimized for end-fire probes (053L-EF).

Key Benefits

- Compatible with CT, MR, and ultrasound imaging
- Supports training for ultrasound-guided cryosurgery, seed implantation, and needle biopsy with one phantom
- Zerdine® hydrogels help minimize needle tracking
- Accommodates various probes and surgical devices

Tissue Equivalent Ultrasound Prostate Phantoms

Supports training and demonstration of prostate applications

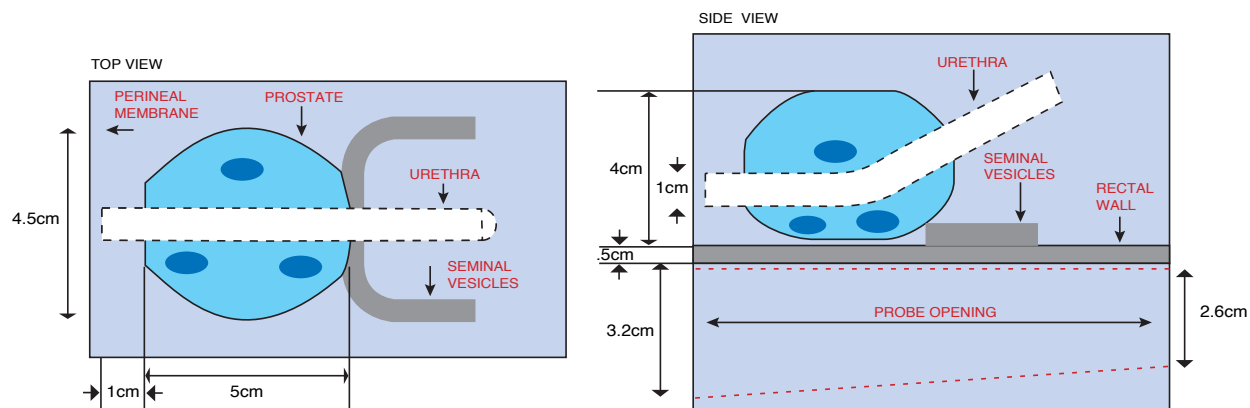
Specifications

Container	
Dimensions	11.5 × 7 × 9.5 cm (4.53" × 2.76" × 3.74")
Weight	0.9 kg (2 lbs)
Front Probe Opening	3.2 cm diameter (1.26" diameter)
Rear Probe Opening	2.6 cm diameter (2.6" diameter)
Background Gel	
Ultrasound Appearance	Anechoic
CT Appearance	Dark
MRI Appearance	Dark (T1 weighted)
Elastography	Soft
Urethra	
Dimensions	7 mm diameter
Ultrasound Appearance	Anechoic
CT Appearance	Dark, similar to prostate
MRI Appearance	Darker than prostate (T1 weighted)
Elastography	Stiffer than prostate
Seminal Vesicles	
Dimensions	7 mm diameter × 10 cm length (0.275" diameter × 3.94" length)
Imaging Appearance	Similar to prostate
Perineal Membrane	
Thickness	3 mm (0.118")
Material	Z-Skin™ elastomer

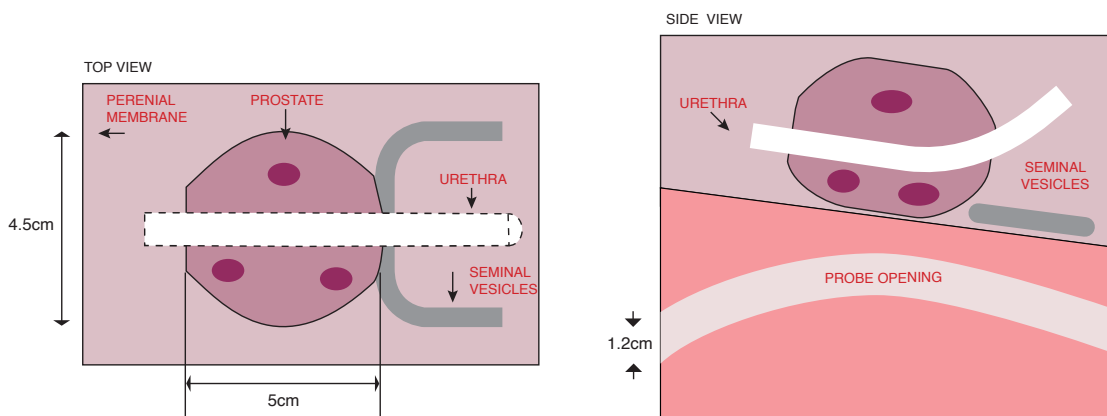
Prostate	
Dimensions	6 × 4.5 × 4 cm (2.46" × 1.77" × 1.58")
Ultrasound Appearance	Average echogenicity
CT Appearance	Dark, slight contrast with background
MRI Appearance	Bright (T1 weighted)
Elastography	Soft, slight contrast with background
Volume	53 cc
Lesions (053L and 053L-EF)	
Quantity	3
Dimensions	Approximately 10 mm diameter
Ultrasound Appearance	Hypoechoic
CT Appearance	Bright
MRI Appearance	Dark (T1 weighted)
Elastography	Stiff
Rectal Wall	
Dimensions	0.6 × 11 × 0.5 cm (0.236" × 4.33" × 0.196")
Imaging Appearance	Similar to urethra

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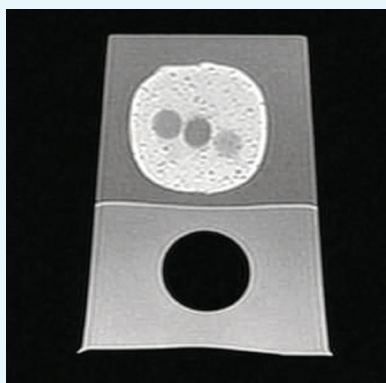
Standard Side-Fire Configuration



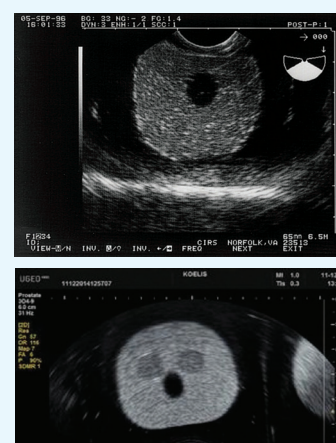
End-Fire Configuration



CT of 053L



T1 weighted MRI of 053L



Note: If any device has been inserted into the phantom, the warranty does not cover claims related to material desiccation or needle tracking.