



GOLD
STANDARD
PHANTOMS

MULTISAMPLE 190N

One phantom
endless possibilities

- Quantitative T1 and T2 relaxometry
- Diffusion
- Metabolic imaging
- Spectroscopy
- Multi-nuclear imaging
- Fat fraction

The MultiSample190N is a 190mm diameter cylindrical phantom, capable of holding up to eight industry standard Nalgene 30ml HDPE vials. The phantom can be supplied pre-filled with configurations for diffusion or relaxometry, or empty for filling by the user, making it ideal either for acquisitions/technique development, or quality assurance of advanced imaging methods.

- Standardised multi-vial phantom, using industry standard 30ml sample vials
- Can be filled with ice-water mix to ensure thermal stability at 0°C.
- Available pre-filled with configurations for diffusion and relaxometry, or empty for your own unique applications.
- Use for Quality Assurance testing and validation of advanced MRI techniques

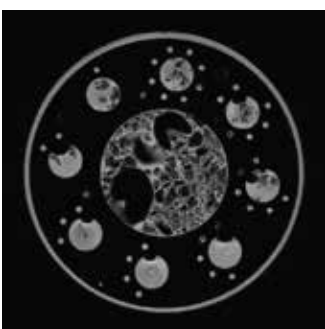
More
Demo Data
at GSP
Viewer



The sample holder incorporates MR-visible sample identification fiducials for each vial, and two fillable glass tubes run the length of the sample holder with single-order rotational symmetry, making it easy to unambiguously identify every sample vial in every MR image.

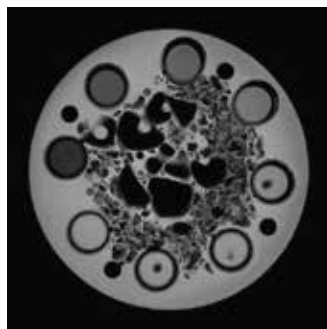
Fiducial

Acquired MR image



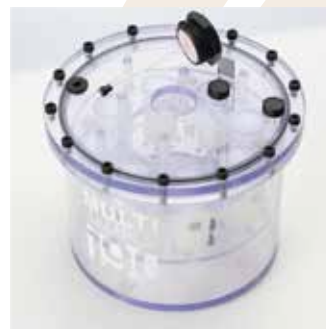
Cold as Ice

Cool and precise 0°C



M40 Port

Easy and simple fill



Standardised design

Simplified analysis



Temperature Monitoring

Have temperature sensitive applications such as diffusion that require the samples to be kept at a constant temperature? Keep them at a cool and precise 0°C using an ice-water mix: simply fill with a base-layer of ice up to the fill line, attach the lid and sample holder, then top up ice via the 40mm port.

Specification Table

Diameter	190mm (internal volume) 200mm (outer cylinder) 228mm (widest point)
Length	163mm
Overall dimensions	(L)228mm x (W)228mm x (H)163mm
Ports	1x 1/4" BSP (filling ports) 2x M12x1.5 (probe ports) 1x M40 port (ice fill)
Materials	Body and Lid: Polycarbonate Sample holder: Polycarbonate and Acrylic Fillable Tube Fiducials: Glass and EVA Plastic Fasteners: GF Nylon and Polycarbonate Plug: GF Nylon Seals: Nitrile
Sample containers	8x Nalgene 30ml HDPE vials
Phantom Contents	Can be: - Supplied empty. - Filled with standard diffusion and relaxometry configurations. - Filled to customer specification on request.
Packaging	Foam padded box for storage and transport
Optional extras	Torque screwdriver (highly recommended for self-filling applications to prevent damage from overtightening screws.)

The standardised design, combined with voxel models generated directly from CAD, provides a structural reference to register acquired images to and extract regions of interest for further analysis.

Pre-filled vials
Available!
in standard configurations
for Diffusion
and Relaxometry

with NIST certification

Other materials
Available!
on request.

S.L.T. S.r.l. – Via Torino, 30 – 20063 Cernusco sul Naviglio (MI)

Tel. +39 02 48.46.40.64 – Fax +39 02 48.46.40.09 – info@sltsrl.com – www.sltsrl.com

