Paretor
155 Arlington St
Watertown, MA 02478

Paretor – Predictable Delivery Protocols & Formulations

Mineral Nanoparticle Colloid | Cell transfection | Cargo Carrier

For research use only. Not for use in Diagnostic nor Therapeutic Procedures.

Up to 65% transfection efficiency in available cells in 2 hours*

APPLICATIONS:
Cytosolic delivery of cargo including siRNA, microRNA, ASO, Antagomirs up to 30nt, small molecules, proteins up to 15KDa

STABILITY:
One month at 4 °C, 21 °C.
Nine months at -20 °C
Freeze-thaw stable, thaw on ice

Size:	40-45nm
PDI:	<0.3
Control Charge:	-27mV
Carrier Charge:	-15mV
Polymer:	Dextran
Cargo Conjugation:	Thiol-reactive
Surface Logic:	Lipid Head
Surface Passivation:	Zwitterionic
Magnetic Saturation:	< 1emu/g

Particles Received:
PA-001 base construct (10-001, 10-002, 10-003, 10-004, 10-005, and 10-005)
Derived from PA-001
Concentration: **1.0×10^{11} particles/mL**
Total volume: **1.0 mL** (4 × 250 µL aliquots)

Storage Buffer System:
- 0.5 mM Sodium Gluconate
- 2 mM Sodium Citrate
- 5% Trehalose
- pH neutral, isotonic, RNase-free

Surface Charge:
- Control (10-001): –27 mV
- Carrier (10-002): –15 mV

* Some cell types exhibit **charge sensitivity**; expect differences in uptake depending on metabolic state and confluency.

Storage & Stability:
- Freeze–thaw stable
  - Stability at –20 °C: validated to nine months
  - Stability at 4 °C: Validated to 4 weeks
- Store dark + dry regardless of temperature
- Thaw ON TOP of ice (not submerged) to prevent uncontrolled warming
- Inspect for particulates (should be none). If present, discard vial and notify.

Functional Chemistry:
- Carrier particles include maleimide group adducts for thiol-reactive surface conjugation
- Zwitterionic surface logic; ligand shell is stable and non-aggregating
- Avoid moisture and light to preserve functional groups

* Demonstrated in BT20 cells. Your results may vary. Not approved for clinical use. User responsible for safety, compliance.