



Product Information

Core-shell structured UCNPs

Cat. No.: X26-05-ZQ156

Size: 100 mg; 250 mg; 500 mg; 1 g; 5 g

Synonym: Core/shell upconversion nanocrystals; Heterostructured UCNPs; Shell-passivated upconversion nanoparticles

This product is for research use only and is not intended for diagnostic use.

Product Information

Description	These core-shell structured upconversion nanoparticles (UCNPs) feature a dual-layered architecture where an active luminescent core is surrounded by an epitaxially grown inorganic shell. The composition is designed so that the undoped shell physically isolates the activator ions from high-frequency vibrations of surface ligands and solvent molecules. This physical structure significantly reduces surface-related quenching and leads to a substantial increase in the overall upconversion quantum yield.
Source	Custom synthesis
Form	Solid or powder
Purity	≥95%
Impurities	No visible impurities to the naked eye.
Identity	HPLC/MS/NMR
Stability	This product is stable for one year when stored at the recommended temperature in lyophilized powder.
Quality Level	Research grade
Storage	Store at -20°C.