

Product Information

NaYF₄:25%Yb,7%Tm@NaYF₄ core-shell UCNPs

Cat. No.: X26-05-ZQ705

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

Synonym: 25Yb,7Tm core-shell UCNPs; High-thulium doped blue core-shell; NaYF₄:25%Yb,7%Tm@NaYF₄ nanophosphors

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

Product Information

Description	These sodium yttrium fluoride:25%ytterbium,7%thulium@sodium yttrium fluoride (NaYF ₄ :25%Yb,7%Tm@NaYF ₄) core-shell upconverting nanoparticles (UCNPs) utilize a high activator concentration to shift the emission profile towards specific ultraviolet and blue bands. The undoped NaYF ₄ shell layer is critical for maintaining high efficiency by insulating the highly doped core from surface quenching. This structure is ideal for studying cross-relaxation and energy transfer efficiency in heavily doped lanthanide systems.
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.