

## Product Information

### Single-doped oxide UCNPs

**Cat. No.:** X26-05-ZQ730

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

**Synonym:** Mono-doped upconversion oxides; Single-activator oxide nanophosphors; RE-single-doped oxide UCNPs

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

#### Product Information

<b>Description</b>	These single-doped oxide upconverting nanoparticles (UCNPs) are oxide-based host materials (such as $Y_2O_3$ or $ZrO_2$ ) doped with a single rare-earth species. Unlike co-doped systems, these materials utilize ground-state and excited-state absorption of a single ion to achieve upconversion. They are designed for research into the fundamental spectroscopic properties of lanthanide ions in oxide lattices and the study of non-sensitized upconversion mechanisms.
<b>Source</b>	Custom synthesis
<b>Form</b>	Solid or powder
<b>Purity</b>	$\geq 95\%$
<b>Impurities</b>	No visible impurities to the naked eye.
<b>Identity</b>	HPLC/MS/NMR
<b>Stability</b>	This product is stable for one year when stored at the recommended temperature in lyophilized powder.
<b>Quality Level</b>	Research grade
<b>Storage</b>	Store at $-20^\circ C$ .