

## Product Information

### CNT-Cu composite wire

**Cat. No.:** X26-04-ZQ556

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

**Synonym:** Copper-decorated CNT wire; CNT/Cu hybrid wire; Conductive copper-carbon nanotube wire

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

#### Product Information

<b>Description</b>	This wire is a hybrid material composed of carbon nanotubes and copper, engineered to provide high electrical and thermal conductivity. The CNTs are embedded within the copper matrix to enhance the tensile strength and reduce the coefficient of thermal expansion of the composite. This material is designed to explore the limits of current density and structural performance in micro-scale wiring.
<b>Source</b>	Custom synthesis
<b>Partical Size</b>	10-30 $\mu\text{m}$
<b>Functional Group</b>	Copper (Cu)
<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>Applications</b>	This product can be used for the research of high-performance electrical interconnects, the study of thermal management materials, and the development of lightweight conductive cables.
<b>Storage</b>	Store at $-20^{\circ}\text{C}$ .