



Product Information

Silver nanoparticle-decorated zinc sulfide (Ag/ZnS)

Cat. No.: X26-06-ZQ2858

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

Synonym: Ag/ZnS; Silver nanoparticle-decorated zinc sulfide nanospheres; AgNP-loaded ZnS semiconductor composites; Silver nanoparticle anchored zinc sulfide heterostructures

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

Product Information

Description	This inorganic material features a heterogeneous design consisting of a crystalline zinc sulfide (ZnS) semiconductor semiconductor template decorated with metallic silver (Ag) nanoparticles. The inorganic hetero-junction couples the distinct wide-bandgap optoelectronic and luminescent properties of the ZnS host with the localized surface plasmon resonance (LSPR) and high electrical conductivity of the silver phase. This composition displays high structural durability and unique electronic band alignments across wide fluid pH scales.
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
Applications	This product can be used for investigating plasmonic-semiconductor electronic energy coupling, studying photophysical energy conversion pathways, and testing heterogeneous catalyst configurations.
Storage	Store at -20°C.