



Product Information

Silver nanoparticle-decorated silica (Ag/SiO₂)

Cat. No.: X26-06-ZQ2883

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

Synonym: Ag/SiO₂; Silver nanoparticle-decorated silica nanospheres; AgNP-loaded SiO₂ core-shell or matrixed structures; Silver nanoparticle anchored silica carrier composites

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

Product Information

Description	This inorganic material features a core-shell or decorated design consisting of an amorphous silica (SiO ₂) core sphere template decorated with crystalline silver (Ag) nanoparticles. The insulating silica core effectively prevents direct interparticle silver coalescence and provides an ideal, chemically inert template that is highly resistant to structural collapse during intensive processing cycles. The distributed silver particles introduce strong localized surface plasmon resonance (LSPR) and high optical scattering parameters across the composite interface.
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 to study silane condensation kinetics, evaluate metal insulation barriers on oxide matrices, and analyze plasmonic optical scattering pathways.
Storage	Store at -20°C.