

Product Information

Biotin-conjugated gold nanorods (Biotin-AuNRs)

Cat. No.: X26-04-ZQ512

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

Synonym: Biotinylated AuNRs; Biotin-labeled gold nanorods; Biotin-Au nanorods

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

Product Information

Description	These gold nanorods are covalently conjugated with biotin molecules, providing a platform for high-affinity binding with streptavidin-labeled substrates. The particles maintain their characteristic longitudinal surface plasmon resonance (LSPR) in the near-infrared region, which is sensitive to local refractive index changes. This surface modification is optimized to prevent aggregation while ensuring the accessibility of the biotin ligand for molecular recognition experiments.
Source	Custom synthesis
Functional Group	Biotin
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 plasmonic sensing research, the assembly of gold-based nano-architectures, and the study of biotin-avidin binding kinetics.
Storage	Store at -20°C.