Gold Nanoplates-PEI
PRODUCT DATA SHEET

Gold Nanoplates-PEI

Description

Gold Nanoplates-PEI is a functionalized nanomaterial obtained by modifying the surface of Gold Nanoplates with Polyethylene (PEI). This material has demonstrated extensive application potential in multiple fields. PEI is a cationic polymer that can significantly alter the surface properties and functions of Gold Nanoplates through electrostatic interactions or chemical bonding with negatively charged functional groups on the surface. This modification enhances the stability of gold nanosheets, preventing their aggregation and precipitation in solution, ensuring their good performance and structural stability under different environmental conditions. The modification of PEI also enhances the biocompatibility of Gold Nanoplates, reduces their toxicity to living organisms, and makes them suitable for the biomedical field. The addition of PEI effectively passivated the surface of Gold Nanoplates, preventing particle aggregation. These advantages enhance the application of Gold Nanoplates PEI in catalysis, sensing, and biomedical fields, especially in highly sensitive detection techniques such as surface enhanced Raman spectroscopy .

Abvigen Inc can provide high-quality Gold Nanoplates-PEI in various specifications. This product has uniform particle size and good electrochemical performance, which can meet the personalized material needs of various customers in research and development, testing, production, and consumption.

For custom sizes, formulations or bulk quantities please contact our customer service department.

Website: www.abvigen.com Phone: +1 929-202-3014 Email: info@abvigenus.com

Characteristics

Optical Density: OD=1

Size: 5 ml

Surface: Polyethylenimine

Composition: Gold Nanoplates

Plate Thickness : 10 nm - 100 nm

Buffer: DI Water

Form: Suspension

Store: Storage at 2 - 8 °C

Storage

This product should be stored at 4°C. **DO NOT FREEZE**.

For 1 OD of Gold Nanoplates-PEI

Plate Thickness	Edge Length	Peak SPR Wavelength	NPS/ml	Molarity (pM)	Surface Area (nm2)
10 nm	1000 nm	600 nm	2.59E+08	4.30E-01	1.00E+07
50 nm	1000 nm	650 nm	5.18E+07	8.60E-02	5.00E+07
100 nm	1000 nm	700 nm	2.59E+07	4.30E-02	1.00E+08

Advantage

Good catalytic activity

Good biocompatibility

Good chemical stability

Easy to surface modify and functionalize

Good conductivity

Local surface plasmon resonance

1378 US-206 Ste 6-126, Skillman, NJ USA
Email: info@abvigenus.com
Tel: 1-816-388- 0112 Fax: 1- 888-616-0161

Applications

Optical sensors

Biosensors

Optoelectronic equipment

Electrochemical catalysis

Ordering Information

Website: www.abvigen.com

Phone: +1 929-202-3014

Email: info@abvigenus.com

1378 US-206 Ste 6-126, Skillman, NJ USA
Email: info@abvigenus.com
Tel: 1-816-388- 0112 Fax: 1- 888-616-0161