



## Gold Nanoplates-PAH PRODUCT DATA SHEET

### Gold Nanoplates-PAH

#### Description

Polyallylamine hydrochloride (PAH) as a modifier can significantly enhance the functional properties of Gold Nanoplates. PAH is a multifunctional cationic polymer with excellent adsorption properties that can interact with various substances. Its molecular structure contains acrylic and amino groups, which enable PAH to be adsorbed through mechanisms such as electrostatic interactions, hydrogen bonding, and van der Waals forces. The cationic properties of PAH enable it to effectively adsorb and stabilize the surface of gold nanoplates, enhancing their interactions with other molecules or ions. Gold Nanoplates PAH can be used for pollutant adsorption in water treatment, especially for the removal of heavy metal ions and organic dyes. In addition, Gold Nanoplates PAH has shown potential in the biomedical field for adsorption and separation of biomolecules, with good selectivity and efficiency.

Abvigen Inc can provide high-quality Gold Nanoplates-PAH 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](http://www.abvigen.com) **Phone:** +1 929-202-3014 **Email:** [info@abvigenus.com](mailto:info@abvigenus.com)



### Characteristics

Optical Density: OD=1

Size: 5 ml

Surface: Polyallylamine hydrochloride

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-PAH

Plate Thickness	Edge Length	Peak SPR Wavelength	NPS/ml	Molarity (pM)	Surface Area (nm <sup>2</sup> )
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



### **Applications**

Optical sensors

Biosensors

Optoelectronic equipment

Electrochemical catalysis

### **Ordering Information**

Website: [www.abvigen.com](http://www.abvigen.com)

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