



## Gold Nanotriangles-PAH PRODUCT DATA SHEET

### Gold Nanotriangles-PAH

#### Description

Gold Nanotriangles are pentagonal sheet-like gold triangles composed of gold atoms, with a flat surface and sharp edges. This material has the advantages of precise size, high monodispersity, and easy surface functionalization. Gold Nanotriangles can serve as highly sensitive probes for precise detection of biomolecules in fields such as biological immune detection and protein labeling. Gold Nanotriangles are ideal imaging enhancers in fields such as dark field optical imaging and fluorescence enhancement due to their excellent optical properties. In addition, Gold Nanotriangles can serve as a substrate for surface enhanced Raman scattering, increasing the intensity of Raman scattering signals and achieving high-sensitivity detection of molecules. PAH surface modification is the use of cationic polyallylammonium hydrochloride to modify the surface of Gold Nanotriangles. Surface modification of PAH can introduce a large number of hydrophilic groups on the surface of Gold Nanotriangles, effectively improving the surface hydrophilicity. Surface modification of PAH has low background interference, can provide high covalent coupling efficiency, reduce non-specific binding, and improve detection sensitivity and accuracy.



Abvigen Inc can provide high-quality Gold Nanotriangles-PAH with various particle sizes. Gold Nanotriangles-PAH have uniform particle sizes and good dispersion, 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

OD: 1

Size: 5 ml or others

Surface: PAH

Shape: Triangle piece

Composition: Gold Nanotriangles

Buffer: Supplied in DI water

Store: Storage at 2 - 8 °C

### Storage

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

### Specification Table of Gold Nanotriangles-PAH

Cat No	Edge (nm)	Thickness (nm)	Peak SPR Wavelength (nm)	NPS/ml	Molarity (pM)	Moles	Molar Ext. (M <sup>-1</sup> cm <sup>-1</sup> )	Surface Area (nm <sup>2</sup> )
BGNT-575	50	30	575	7.98E+10	1.30E+02	1.33E-13	7.52E+09	6665
BGNT-600	90	35	600	2.11E+10	3.50E+01	3.52E-14	2.84E+10	16465
BGNT-625	115	40	625	1.13E+10	1.90E+01	1.89E-14	5.30E+10	25253
BGNT-650	125	45	650	8.51E+09	1.40E+01	1.42E-14	7.05E+10	30406
BGNT-700	150	50	700	5.32E+09	8.90E+00	8.86E-15	1.13E+11	41985
BGNT-780	200	55	780	2.72E+09	4.50E+00	4.53E-15	2.21E+11	67640

### Advantage

High specific surface area

High load capacity

Surface easy functionalization

Good dispersibility

Good chemical stability

High hydrophilicity



### **Applications**

Biological immune testing

Protein labeling

Drug carrier

Dark field optical imaging

Fluorescence enhancement

Surface enhanced Raman substrate

Biosensor materials

### **Ordering Information**

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

Phone: +1 929-202-3014

Email: [info@abvigenus.com](mailto:info@abvigenus.com)