Technical Specification of Gold Nanocrystals with Carboxylic Acid Group

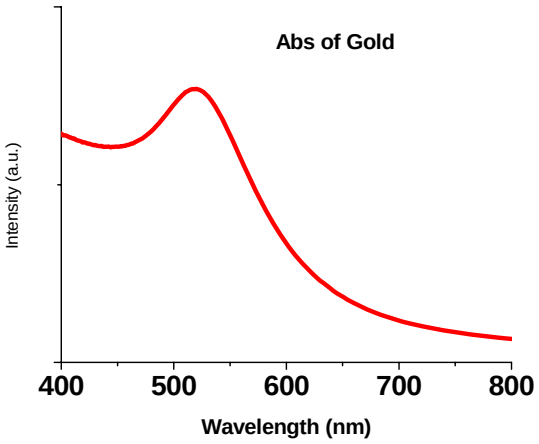
Description: AuH is a group of water soluble gold nanocrystals with amphiphilic polymer coating. Their surface functional group is carboxylic acid. The zeta potential of AuH is from -30mV to -50mV. Their organic layers consist of a monolayer of dodecanethiol and a monolayer of amphiphilic polymer. The thickness of the total organic layers is about 4 nm. The hydrodynamic size of the nanocrystals is about 8-10 nm larger than their inorganic core size measured by TEM.

AuH is very stable in most buffer solutions in the pH range of 3-14.

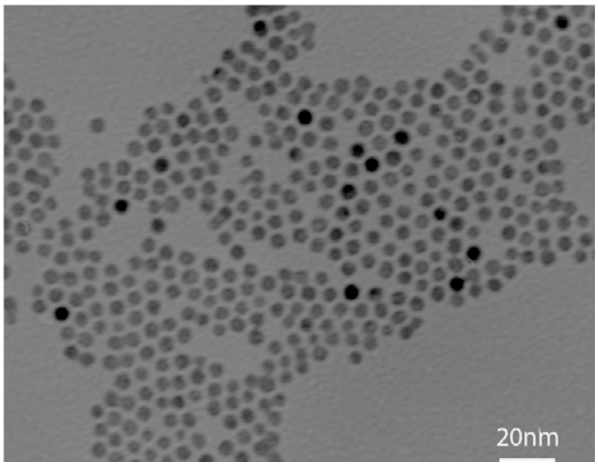
AuH can be conjugated to protein, peptide and DNA by following our Standard Conjugation Protocol. Ocean NanoTech also offers AuH-Protein Conjugation Kit which includes all the crosslinking agents and buffer solutions. If you need to perform AuH-protein conjugation, we recommend that you remove your original buffer solutions and use our Activation Buffer to disperse your protein for the conjugation. Otherwise, precipitation may occur. If it's your first time to perform this conjugation, you may use BSA as model protein to get familiar with the whole process.

Catalog number:	AuH-06-10
Product name:	Gold nanocrystals with carboxylic acid group.
Solvent:	50 mM borate buffer solution pH 8.5
Au size by TEM:	6 nm
Size distribution:	<5%
Absorption peak:	520 nm
Surface group:	Carboxylic acid
Storage:	4-25°C; Do not freeze.
pH stability:	2-14
Buffer stability:	Borate, Tris, HEPES, PBS, etc.
Shelf life:	6 months
Volume:	2 mL
Concentration:	5 mg/mL (Au)
Concentration:	6.7 nmole/mL (nanocrystals)

2143 Worth Lane
Springdale, AR 72764
www.oceannanotech.com
Email: orders@oceannanotech.com
Tel: 479-751-5500
Fax: 479-751-5502



Absorption spectrum of gold nanocrystals



TEM image of Gold nanocrystals

For R&D only. Not intended for food, drug, household, agricultural, or cosmetic use.
Ocean NanoTech, LLC shall not be held liable for any damage resulting from handling or contact with the above product.

2143 Worth Lane
Springdale, AR 72764

www.oceannanotech.com
Email: orders@oceannanotech.com

Tel: 479-751-5500
Fax: 479-751-5502