

Autoclaved gold nanoparticles with carboxylic group ([Catalog # GVC](#))

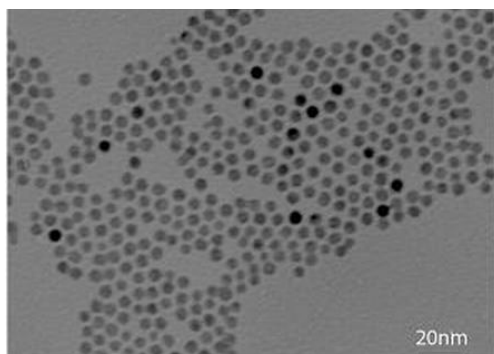
Description: GVC-AcIaF™ is a group of spherical water soluble gold nanoparticles carboxyl functional groups. They are manufactured using traditional water based methods that result in improved quality in terms of size tunability, monodispersity and crystallines structrue. They are autoclaved at 121 for 30 min. This sterilization process removes potentially problematic miroorganisms, DNases and RNases, making these gold nanoparticles suitable for the biological applications requiring sterility and/or DNases/RNases free conditions.

These particles have carboxyl groups on the surface thus can be easily conjugated to amine containing biomolecules.

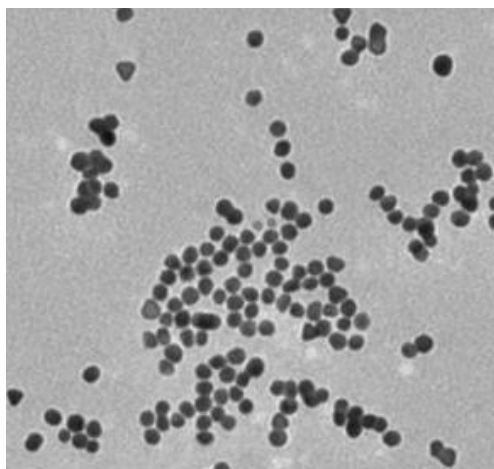
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|--------------------------|---|
| Catalog number: | GVC |
| Product name: | Autoclaved gold nanoparticles with carboxylic group |
| Solvent: | DI H ₂ O |
| Reactive group: | Carboxylic acid |
| Storage: | 4-25°C; Do not freeze. |
| pH stability: | 4-10 |
| Buffer stability: | Stable in Borate, Tris, HEPES, PBS, MES. |
| Shelf life: | 6 months |
| Concentration: | 20 OD (Au) |

| | | | | | | | |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Au size (nm): | 6 | 15 | 20 | 25 | 30 | 35 | 40 |
| Size tolerance (nm): | 2 | 3 | 3 | 5 | 5 | 10 | 10 |
| Size distribution: | <15% | <15% | <15% | <15% | <15% | <15% | <15% |
| Molar concentration (M) (Au): | 5.48E-8 | 4.58E-9 | 1.55E-9 | 4.12E-10 | 2.67E-10 | 1.44E-10 | 1.01E-10 |
| Au size (nm): | 45 | 50 | 60 | 70 | 80 | 90 | 100 |
| Size tolerance (nm): | 10 | 10 | 10 | 10 | 15 | 15 | 15 |
| Size distribution: | <15% | <15% | <15% | <15% | <15% | <15% | <15% |
| Molar concentration (M) (Au): | 6.67E-11 | 4.49E-11 | 2.53E-11 | 1.36E-11 | 1.12E-11 | 8.14E-12 | 2.72E-12 |

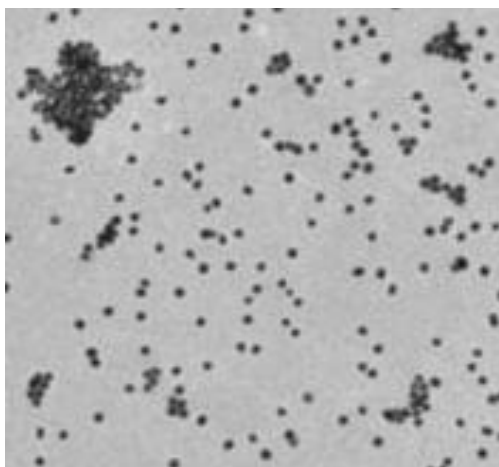
TEM image of 6 nm Au nanoparticles



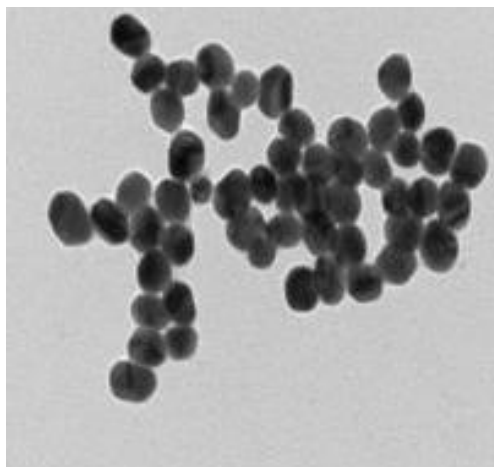
TEM image of 15 nm Au nanoparticles



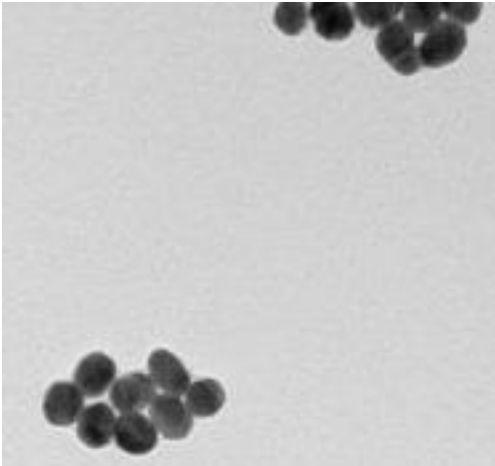
TEM image of 20 nm Au nanoparticles



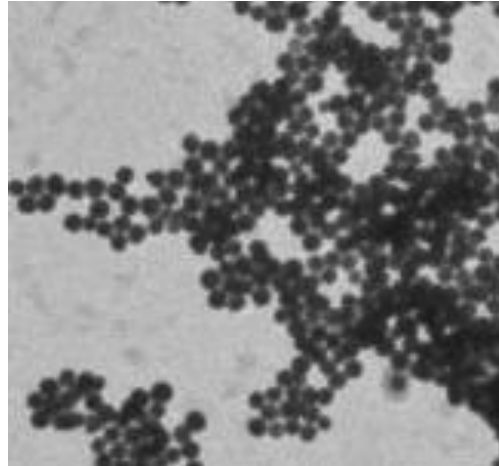
TEM image of 25 nm Au nanoparticles



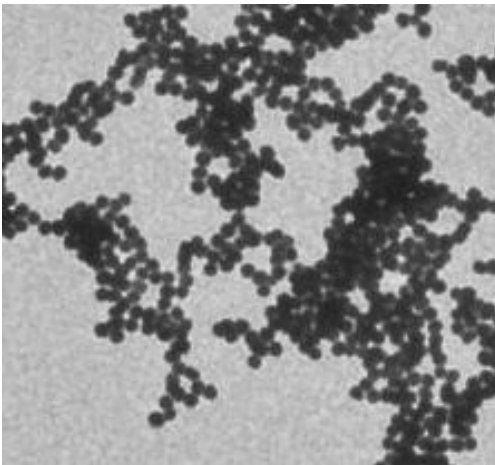
TEM image of 30 nm Au nanoparticles



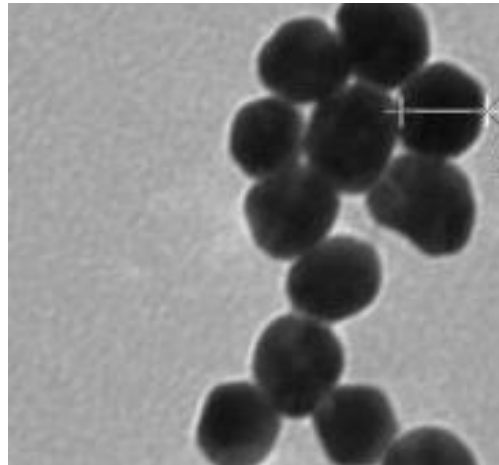
TEM image of 35 nm Au nanoparticles



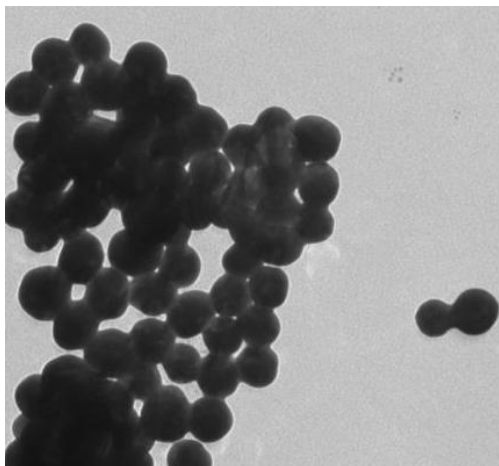
TEM image of 40 nm Au nanoparticles



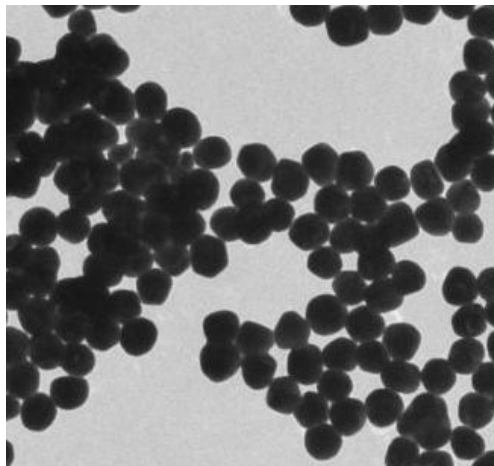
TEM image of 45 nm Au nanoparticles



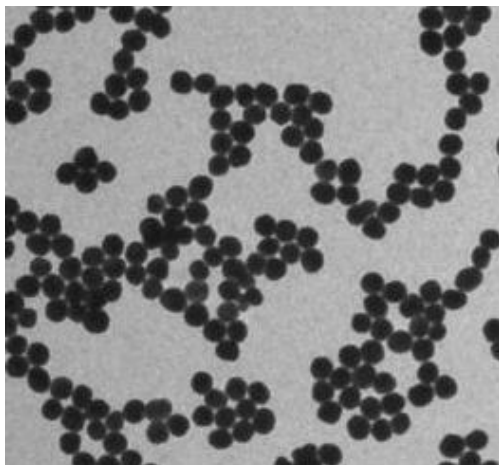
TEM image of 50 nm Au nanoparticles



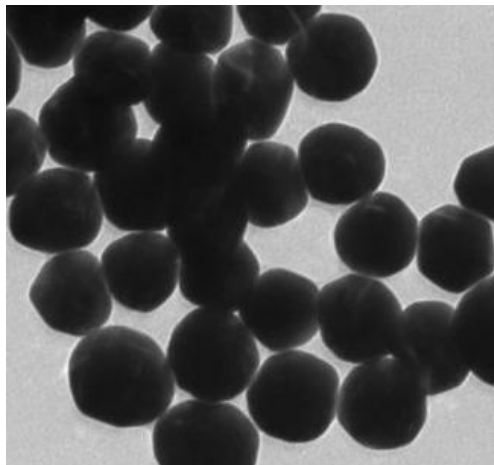
TEM image of 60 nm Au nanoparticles



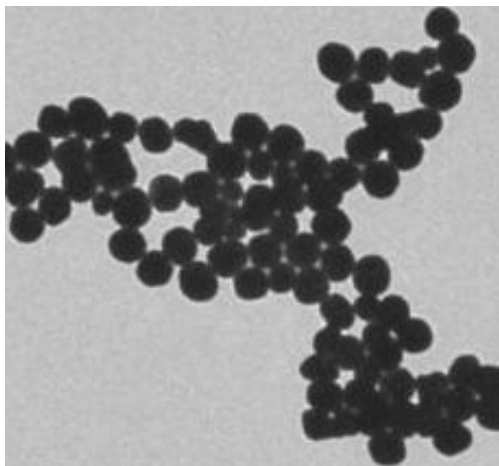
TEM image of 70 nm Au nanoparticles



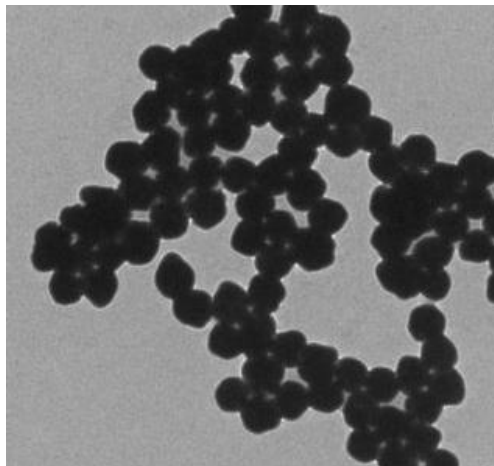
TEM image of 80 nm Au nanoparticles



TEM image of 90 nm Au nanoparticles



TEM image of 100 nm Au nanoparticles



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