Platinum Nanoparticles
PRODUCT DATA SHEET

Platinum Nanoparticles

Description

The study about Platinum nanoparticles has become an attractive field of research due to their high surface area (surface to volume ratio), unique surface plasmon resonance, uses in biomedical science (biocidal effects to bacteria, algae, and virus), photo thermal treatment, and tissue imaging etc. These effective nanoparticles can be prepared by the various methods such as physical, chemical and biological techniques. Platinum nanoparticles combine unique plasmonic optical properties with biocompatibility. In addition, Platinum nanoparticles possess remarkable catalytic activity, able to reduce the intracellular reactive oxygen species (ROS) levels and impair the downstream pathways leading to inflammation. These nanoparticles are useful in a broad range of applications from fuel cell technologies, therapies, catalysis, and more. Abvigen specializes in providing high-purity and monodisperse nanomaterials – delivering the quality you need for consistent results.

Abvigen can provide high quality Platinum nanoparticles. The product has high repeatability between batches, which can meet the needs of different personalized materials such as research and development, testing and production of various customers.

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

Product List

Cat No	Product Name	Concentration	Surface	Size
ABPN-5	Platinum Nanoparticles, 5 nm	0.05 mg/ml	Citrate	50 mL
ABPN-30	Platinum Nanoparticles, 30 nm	0.05 mg/ml	Citrate	50 mL
ABPN-50	Platinum Nanoparticles, 50 nm	0.05 mg/ml	Citrate	50 mL
ABPN-70	Platinum Nanoparticles, 70 nm	0.05 mg/ml	Citrate	50 mL

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

Characteristics

Type: Platinum Nanoparticles

Surface: Citrate

Solvent: Sodium citrate

Concentration: 0.05 mg/ml

Size: 50 mL

TEM diameter: 5 ~ 70 nm

Hydrodynamic diameter (DLS): TEM diameter + 0 ~ 20 nm

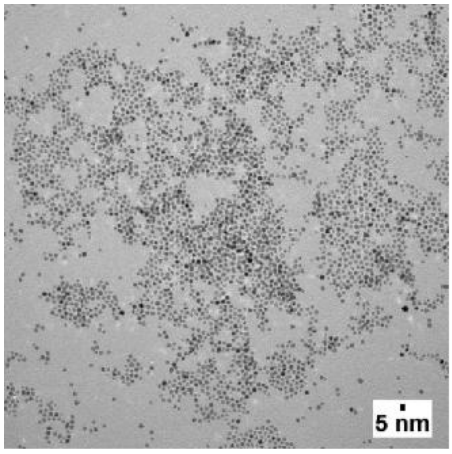
Zeta potential: ≤ –15 mV

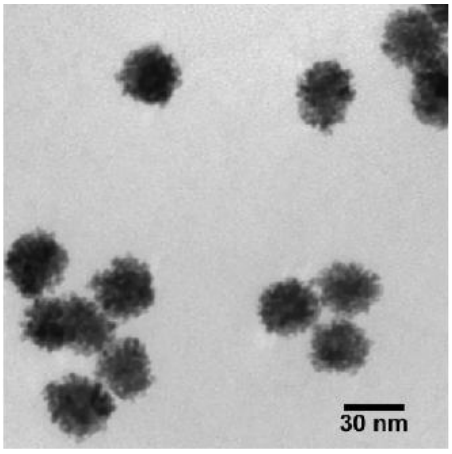
pH of solution: 5.5 ~ 8.0

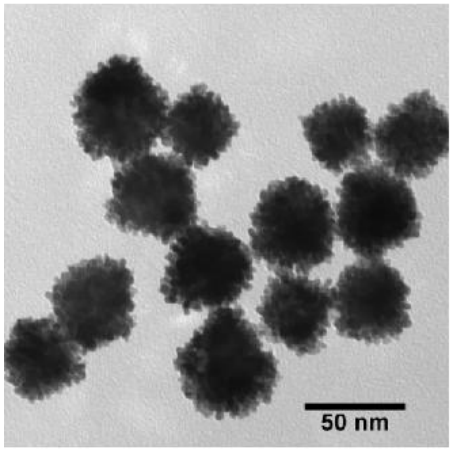
Storage condition: 2 ~ 8°C

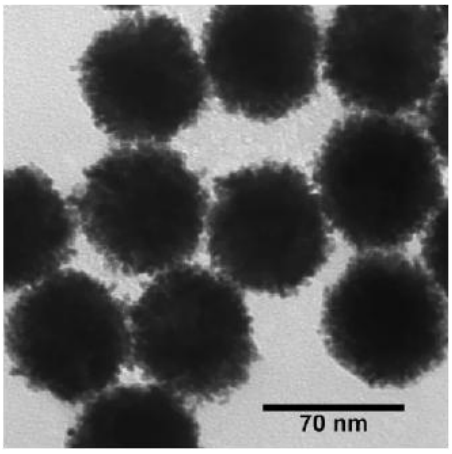
Shelf life: > 1 year

TEM of Platinum Nanoparticles









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

Advantages

Unique plasmonic optical properties

Good biocompatibility

High-purity

Monodisperse

Applications

Fuel cell technologies

Therapies

Catalysis

Quality Control

When stored as recommended (2 ~ 8°C), Platinum nanoparticles are stable for > 1 year. Be sure to visually inspect your materials before each use. If there are any visible particulates floating in the solution, if the color of the solution has changed, or if the color intensity has decreased, the nanoparticles may have aggregated. These materials should be analyzed via UV-Visible spectroscopy, DLS, or TEM for quality verification.

Do not freeze. If nanomaterials in solution are frozen, the nanoparticles will irreversibly aggregate and the solution color may change.

Handling

Shake each bottle prior to use. During storage, the nanoparticles may settle to the bottom of the vial (especially nanoparticles > 30 nm in diameter). Prior to aliquoting or use, resuspend the settled nanoparticles by vigorously shaking the bottle until the solution is homogenous. This will typically require ~30 s of mixing. Visually inspect the bottom of the container to ensure that there are no remaining settled particles.

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