

Cerium Oxide Nanoparticles, 5 nm PRODUCT DATA SHEET

Cerium Oxide Nanoparticles, 5 nm

Cat No: ABCN-5

Description

Cerium oxide nanoparticles have a wide range of antioxidant activities and surface self-regeneration capabilities, and are ideal for ROS scavengers in vivo. It has simulated enzyme activities such as superoxide dismutase (SOD), catalase, peroxidase, oxidase, phosphatase, etc. At the same time, it has the ability to remove active oxygen such as: to remove hydroxyl free radicals, nitric oxide free radicals, peroxynitrite and so on.

Abvigen can provide high quality cerium oxide 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.

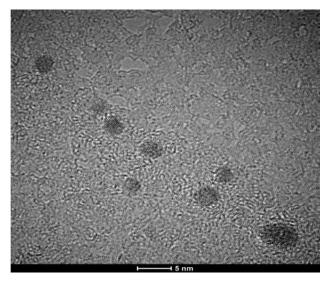
For custom sizes, formulations or bulk quantities please contact our customer service department. Website: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>

Characteristics

Type: Cerium Oxide Nanoparticles Composition: Cerium Oxide Nanoparticles, purified water Surface: Polyacrylic acid Particle size: 5 nm Concentration: 1 mg/mL Size: 2.5 mL Colour: Pale yellow Storage condition: Sealed storage at 4°C Shelf life: 6 months Package: Glass bottle



TEM of Cerium Oxide Nanoparticles



Enzyme Activity Test





The left figure shows that cerium oxide nanoparticles cause TMB to develop color; The right figure shows that cerium oxide nanoparticles cause H_2O_2 to release oxygen rapidly.

Advantages

Uniform particle size

The monodispersity is good

The surface of cerium oxide nanoparticles is negatively charged and carries a large number of carboxyl

groups

High specific surface area

High load

Easy surface functionalization

It has low biotoxicity and can be used in downstream cell animal experiments

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Applications

- ROS remover
- Catalyst and catalyst support
- Electrochemical material
- Polishing material
- Ultraviolet absorber

Storage

Sealed, stored in a refrigerator at 4°C for 6 months.

Ordering Information

Website: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>