

Protein A coated TurboBeads

Cat. No.: 1009

Size: 1 and 5 ml

Conc.: 30 mg/ml

Form: suspended in H₂O, 10 mmol PBS buffer, 0.02wt% sodium azide

Storage

Three months at 4°C. Do not freeze.

1. Composition & Application

Protein A coated TurboBeads are carbon coated nanoparticles (diameter < 50 nm) which are coated with Protein A (> 4wt% Protein A). The particles are suspended at a concentration of 30 mg/ml in a storage buffer.

For more information on the particles please consult the following publication: Grass et al. *Angew. Chem. Int. Ed.* 2007, 46, 4909-4912.

Sonicate TurboBeads prior to use (e.g. by the use of an ultrasonic bath). Collect the particles with a magnet and wash with the appropriate solvent prior to application.

2. Important notes

The material is not fully tested. TurboBeads contains carbon coated cobalt nanoparticles. These nanoparticles have unknown effects on human health and unknown impact on the environment. For R&D use only, not for drug, household or other uses.

The following R & S statements should be followed:

R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R45	May cause cancer
R46	May cause heritable genetic damage
R53	May cause long-term adverse effects in the aquatic environment
R58	May cause long-term adverse effects in the environment
R68	Possible risk of irreversible effects
S3/7	Keep container tightly closed in a cool place
S20/21	When using do not eat, drink or smoke
S24/25	Avoid contact with skin and eyes
S27/28	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water
S29/56	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection

For technical support contact tech_service@turbobeads.com.

3. Application

Protein A coated TurboBeads bind to the FC region of certain antibodies (e.g. Human IgG 1,2,4; Mouse IgG2a,2b,3; Rat IgG2c; Bovine IgG2; Dog IgG; Goat IgG2; Guinea pig IgG; Monkey IgG; Porcine IgG; Rabbit IgG; Sheep IgG).

The antibodies can be coupled by following this protocol:

- wash beads with PBS prior to use (using the magnet for separation)
- resuspend the beads in 1 ml of PBS and mix (ideally sonicate)
- add 10 mg of beads (0.3 ml of suspension) to 1 ml of PBS and mix (ideally sonicate)
- add the antibody (at a concentration of ~ 20 – 200 microgram/ml)
- leave to react under slow tilt rotation for 30 min
- separate the beads from the supernatant by the use of the magnet
- your antibodies are now attached to the beads and can be used for further application

The procedure can be up and downscaled, ideally at constant concentrations (diluting results in lower binding capacities).