

# **Product Data Sheet**

# **HiSur Carboxyl Magnetic Beads**

### **DESCRIPTION**

Ocean NanoTech's HiSur Carboxyl (1  $\mu$ m) are hydrophilic magnetic beads with carboxylic acid groups. These surface groups allow covalent amide bond formation to proteins/peptides via primary amine (NH2) groups. Oligonucleotides, antibodies, or other ligands with amine groups can be easily coupled to the beads for use in many downstream applications, including protein purification, DNA sample preparation and clean-up, proteomics and immunoassays, etc. Activation through carbodimide is required. Attribute to their very large surface area (about three times larger than that of the MonoMag Carboxyl, 1  $\mu$ m, MC1000) and unique surface coating, HiSur Carboxyl exhibit superior binding capacity and low non-specific binding.

### **FEATURES**

- Superior binding capacity.
- High surface area: more binding sites available.
- Low non-specific binding: stable, preblocked beads provide clean purification products without interference from the non-specific binding of complex samples.
- Fast magnetic separation.
- Convenient one-step or two-step coupling.

## **SPECIFICATION**

• Concentration: 50mg/mL

• Storage buffer: DI water, 0.05% NaN<sub>3</sub>, 0.01% tween 20

• Size: 1 μm (nominal)

## STORAGE & USAGE

Store at 2-8°C. Freezing of particles may result in irreversible aggregation and loss of binding activity.

Ensure the suspension is well dispersed prior to use, bath sonication is strongly recommended, as particles are expected to settle during storage.

#### **AVAILABLE PRODUCTS**

Catalog	Product Description	Unit size
HC1000-02	HiSur Carboxyl Beads, 1 μm	2 mL
HC1000-10	HiSur Carboxyl Beads, 1 μm	10 mL
HC1000-100	HiSur Carboxyl Beads, 1 μm	100 mL

# Difference between Mono Mag 1 $\mu m$ vs Hi-Sur Mag 1 $\mu m$

- MonoMag has a layer of coating to isolate the iron oxide from the outer environment. While HiSur does not.
- MonoMag has narrower size distribution than HiSur.
- The surface area of HiSur is around four times larger than that of the same weight of MonoMag. Therefore, HiSur has higher binding capacity than MonoMag.



