

HLB Magnetic Particles Description

HLB magnetic particles is a combination of magnetic separation and the characteristics of the two solid phase extraction technology, can make full use of magnetic microspheres is suitable for automation, the advantages of high throughput sample pretreatment process, and can maintain solid phase extraction technology can be from a mixture of complex system efficient extraction and enrichment of the target material.

HLB magnetic particles are hydrophilic-lipophilic equilibrium solid phase extraction magnetic microspheres, the main body of the microspheres is a porous copolymer of styrene and vinyl pyrrolidone, and the magnetic nanoparticles are uniformly distributed inside the microspheres. Due to the unique properties of the HLB magnetic particles, it is able to efficiently extract and enrich target substances of medium polarity and low polarity from a wide range of complex samples, such as clinical samples, food and agricultural samples, forensic samples, environmental samples, and cosmetic samples. These substances include endogenous hormones, human clinical drugs, pesticides, veterinary drugs, oligopeptides, narcotics and other common small molecules, which can be accurately and quantitatively detected using liquid chromatography-mass spectrometry (LC-MS).

Abvigen's HLB magnetic particles are superparamagnetic particles with excellent colloidal stability and biocompatible coating for biomedical applications including: in-vivo magnetic resonance imaging (MRI), magnetic particles imaging (MPI), magnetic sensing for in-vitro diagnostics, small molecular drug delivery, immunotherapy, hyperthermia, adjuvant for vaccine, etc.

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

Concentration: 10 mg/ml

Size: 10 ml

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

Email:

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Composition: HLB magnetic particles Density: 1.1 g/ccm Buffer: PBS Form: Suspension Store: Storage at 2 - 8 °C

Storage

This product should be stored at 4°C. **DO NOT FREEZE**.

Diameter	Conc. mg/ml	Particles/mg	Particles/ml
200 nm	10	2.17E+11	2.17E+12
1 um	10	1.74E+09	1.74E+10
2 um	10	2.17E+08	2.17E+09
3 um	10	6.43E+07	6.43E+08
5 um	10	1.39E+07	1.39E+08
10 um	10	1.74E+06	1.74E+07
15 um	10	5.14E+05	5.14E+06
20 um	10	2.17E+05	2.17E+06
30 um	10	6.43E+04	6.43E+05
40 um	10	2.71E+04	2.71E+05
50 um	10	1.39E+04	1.39E+05
100 um	10	1.74E+12	1.74E+13

References

[1]He Z, Wang P, Liu D, et al. Hydrophilic–lipophilic balanced magnetic nanoparticles: Preparation and application in magnetic solid-phase extraction of organochlorine pesticides and triazine herbicides in environmental water samples[J]. Talanta, 2014, 127: 1-8.

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[2]Liu H, Lin T, Lin X, et al. QuEChERS with magnetic hydrophilic–lipophilic balanced adsorbent and its application in multi-class veterinary residues in milk by ultra high-performance liquid chromatography-tandem mass spectrometry[J]. Chromatographia, 2018, 81: 265-275.

[3]Liang Y, Li Z, Shi P, et al. Performance of a novel magnetic solid-phase-extraction microsphere and its application in the detection of organic micropollutants in the Huai River, China[J]. Environmental pollution, 2019, 252: 196-204.

Ordering Information

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