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NEW

Ni-NTA Magnetic Agarose Beads for capture assays using 6xHis-tagged proteins

Ni-NTA Magnetic Agarose Beads combine all the benefits of Ni-NTA with the convenience and speed of magnetic-bead technology. They are agarose beads that contain strongly magnetic particles and have metal-chelating nitrilotriacetic acid (NTA) groups covalently bound to their surfaces (Figure 1). The beads are precharged with nickel, ready to capture 6xHis-tagged proteins for high-throughput assays and screening programs, as well as micro-scale purification of 6xHis-tagged proteins in combination with the 96-Well Magnet*. Ni-NTA Magnetic Agarose Beads are the latest addition to the wide range of QIAexpress® products for protein expression, purification, detection, and assay.

Ni-NTA Magnetic Agarose Beads provide:

- ◆ Flexible, scalable assay formats
- ◆ Directed binding of conformationally active proteins
- ◆ Versatility — a choice of native or denaturing conditions
- ◆ Micro-scale purification resulting in concentrated protein samples
- ◆ Fast and simple separation of the strongly magnetic beads

*For more information, call one of our Technical Service Departments.

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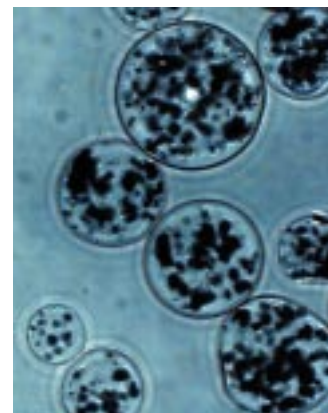


Figure 1 Ni-NTA Magnetic Agarose Beads.

NEW

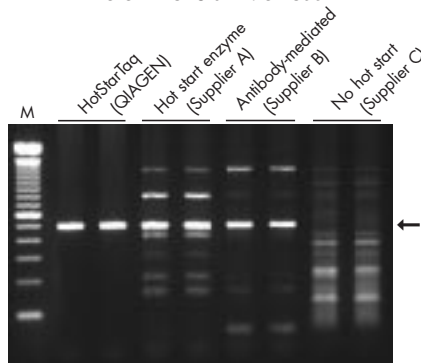
HotStarTaq™ DNA Polymerase for high PCR specificity from the first to the last cycle

For high PCR specificity, QIAGEN introduces HotStarTaq™ DNA Polymerase, a modified form of QIAGEN® Taq DNA Polymerase. HotStarTaq DNA Polymerase reduces amplification of nonspecific products, background, and primer-dimer formation in every PCR cycle.

HotStarTaq DNA Polymerase provides:

- ◆ Higher PCR specificity
- ◆ Minimized nonspecific amplification
- ◆ Easy handling
- ◆ Competitive price

Different Hot Start Methods



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Figure 1 A 497-bp fragment was amplified from 50 copies of an HIV-pol-gene construct mixed with 1 µg human genomic DNA. Different hot start methods were compared: HotStarTaq DNA Polymerase from QIAGEN; hot start enzyme from Supplier A; Taq-antibody mixture from Supplier B; no hot start (Supplier C). Equal volumes of reactions were analyzed on a 2% agarose gel; arrow indicates the specific PCR product. All reactions were performed in duplicate. **M:** markers.



Ni-NTA Magnetic Agarose Beads and 96-Well Magnet with 96-Well Microplate FB

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Improved protein-interaction assays

The QIAexpress System is based on the superior properties of the patented NTA ligand, available exclusively from QIAGEN. Nickel ions immobilized on NTA have high affinity for a tag of six consecutive histidine residues. 6xHis-tagged proteins are immobilized to Ni-NTA Magnetic Agarose Beads in a spatially directed manner and remain conformationally active, providing optimal accessibility of interacting regions. This makes Ni-NTA Magnetic Agarose Beads ideal for all kinds of magnetocapture assays involving biomolecular interactions (Figure 2). Ni-NTA Magnetic Agarose Beads can be used for assays without the need for prior protein purification. Interacting biomolecules

can either be eluted alone or as a complex with the 6xHis-tagged interacting partner by using the mild conditions for elution. Alternatively, the interacting biomolecules can be detected directly. Ni-NTA Magnetic Agarose Beads can be used in single tubes, or in 96-well microplates.

The power of Ni-NTA

The stable Ni-NTA interaction prevents dissociation of nickel ions from the NTA ligand, which results in high binding capacity and specificity for 6xHis-tagged proteins. In addition, the high-affinity interaction between Ni-NTA and the 6xHis tag is unaffected by a variety of reagents, such as strong denaturants and many detergents, which allows binding in a wide variety of buffer systems and under native or denaturing conditions. ■

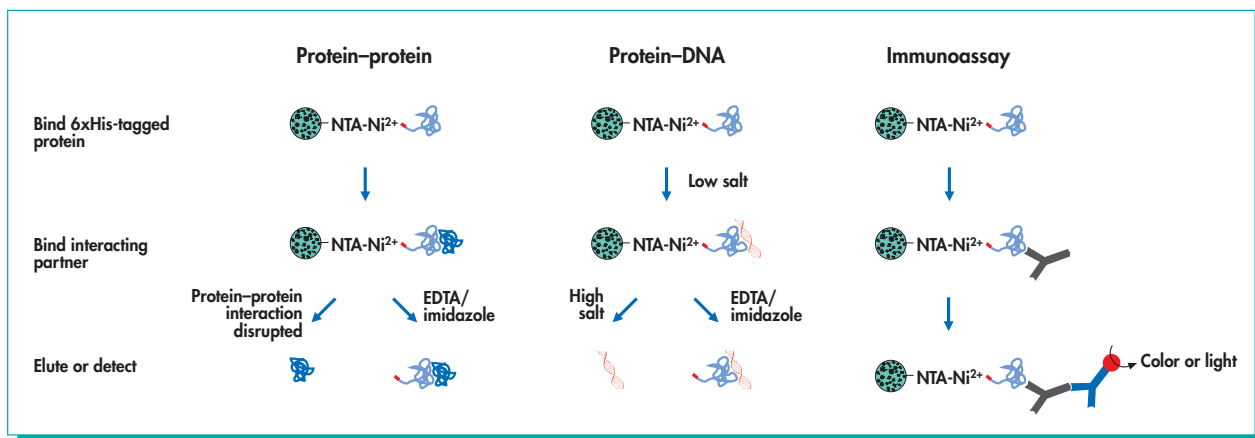


Figure 2 Magnetocapture assays with Ni-NTA Magnetic Agarose Beads.

Ordering Information

Product	Contents	Cat. No.
Ni-NTA Magnetic Agarose Beads (2 x 1 ml)	2 x 1 ml nickel-charged magnetic agarose beads (5% suspension)	36111
Ni-NTA Magnetic Agarose Beads (6 x 1 ml)	6 x 1 ml nickel-charged magnetic agarose beads (5% suspension)	36113
96-Well Magnet	Magnet for separating magnetic beads in wells of 96-well microplates, 2 x 96-Well Microplates FB	36915
96-Well Microplates FB (24)	96-well microplates with flat-bottom wells, 24 per case, for use with the 96-Well Magnet	36985