

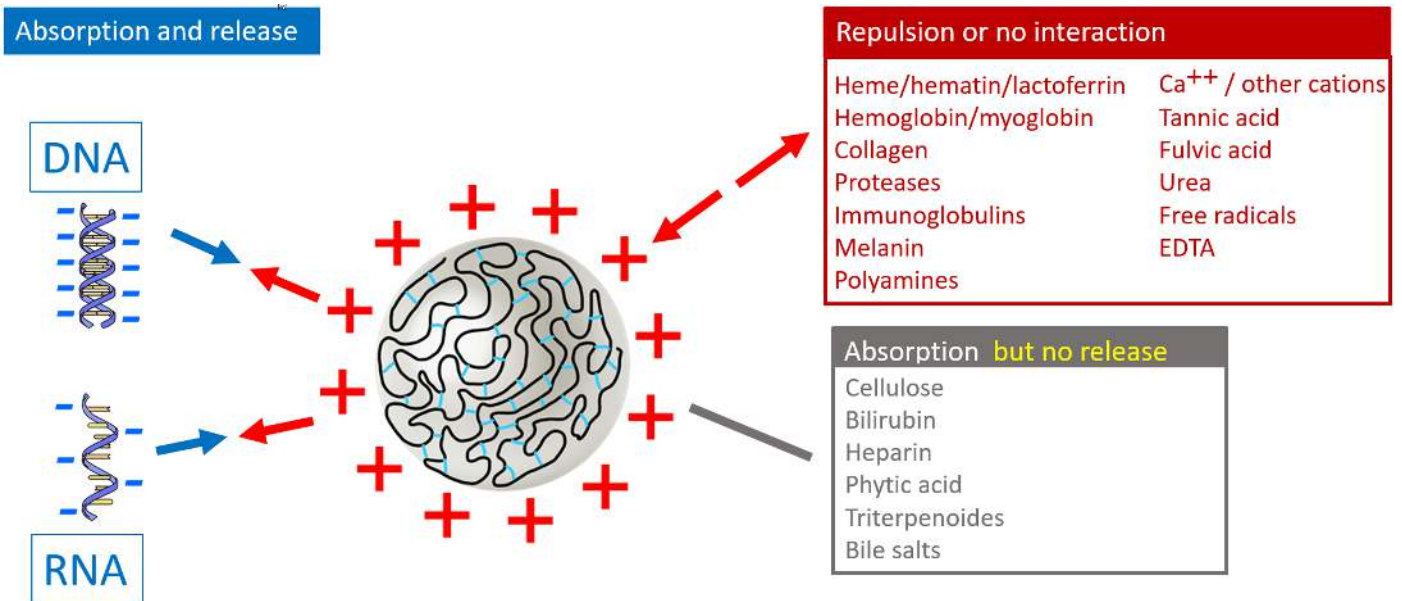


NOVOBEAD: PUSHING THE BOUNDARIES OF PCR DIAGNOSTICS

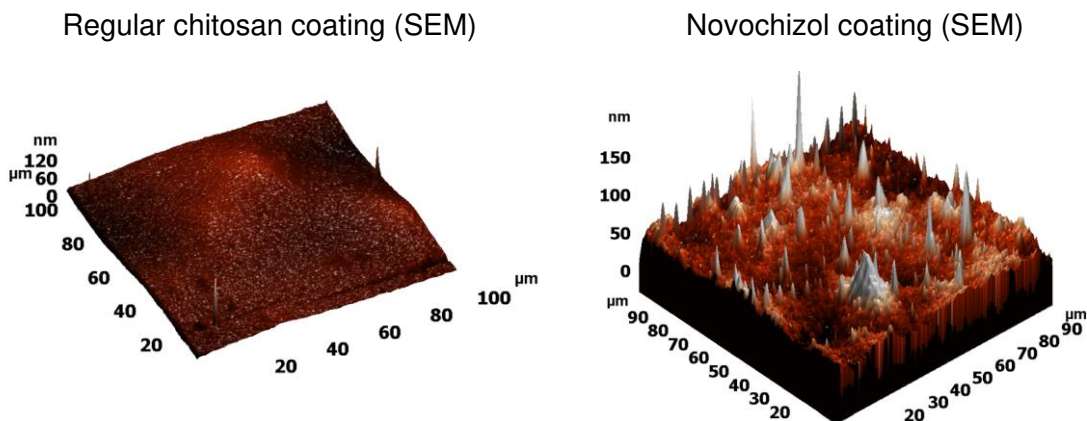
NOVOCHIZOL™- COATED MAGNETIC BEADS FOR SUPERIOR NUCLEIC ACID ISOLATION

Novochizol™ technology creates unique cross-linked chitosan nanospheres displaying exceptional characteristics for the capture and release of nucleic acids:

- **Highly selective nucleic acid extraction.** Chitosan, as a polycationic polymer, ensures strong and reversible electrostatic adsorption of DNA, repulsion of all positively charged molecules and irreversible absorption of (or lack of interaction with) all the usual PCR inhibitors found in animal and plant extracts and non-living environments:

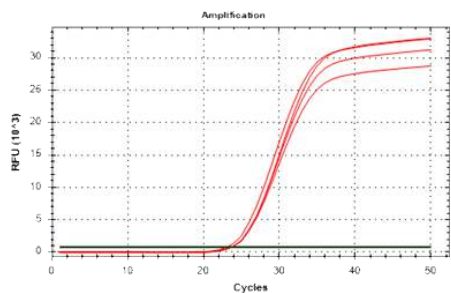


- **Rapid and high-capacity binding.** Novochizol coating of magnetic beads generates a “peaks and troughs” texture, significantly increasing the surface area of nucleic acid absorption, with dynamic traps for both DNA and RNA:

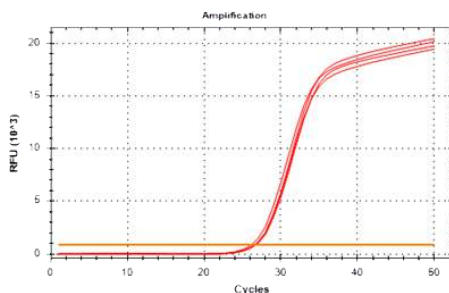


- **Compatible with a wide variety of magnetic beads.** Both plain and silica-coated magnetic beads may be easily coated with Novochizol for more sensitive and more specific regular and real-time PCR assays.

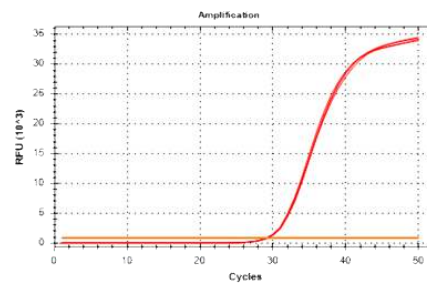
Sample real time PCR and RT-PCR assays using Novobead in inhibitor-containing samples*:



Avian influenza A virus - RNA

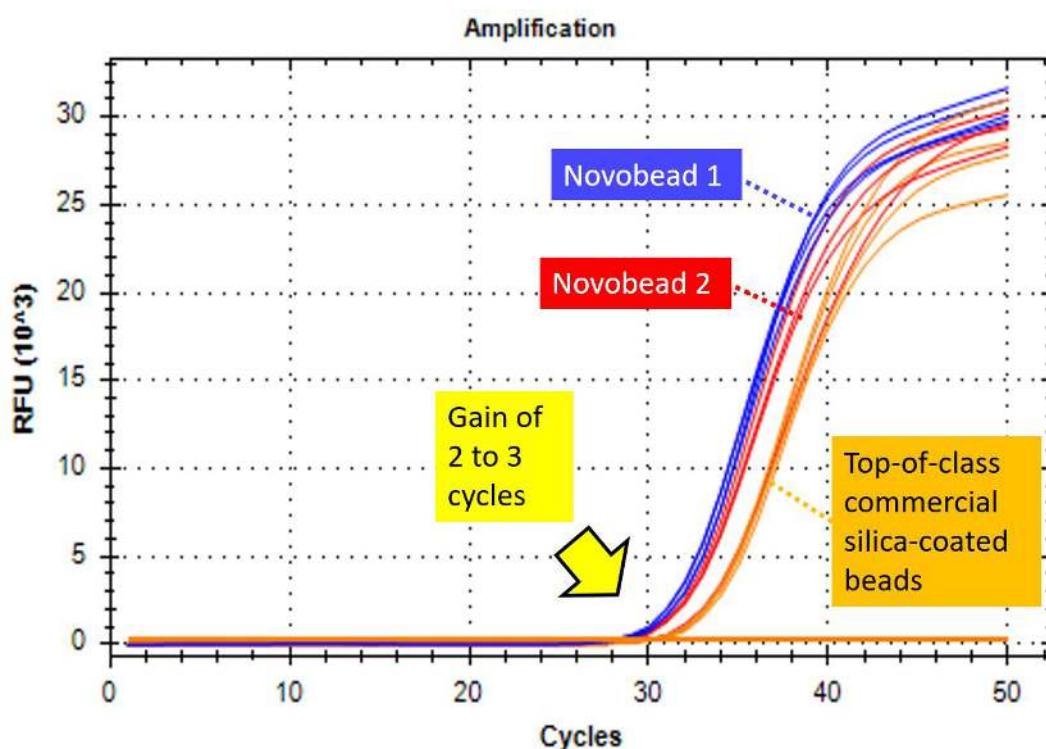


Chicken Anemia Virus - DNA



Infectious Bronchitis Virus - RNA

Novobead enables a gain of 2 to 3 cycles in real time PCR diagnostics in inhibitor-containing samples*:



Typical real time RT-PCR Assay of Infectious Bronchitis Virus (IBV) (RNA marker). Nucleic acid isolation and PCR were carried out using RealBest kits (<https://vector-best.ru/en/>) with either the supplied magnetic beads or Novobead. **The nucleic acid extraction conditions were not optimized for Novobead.**

* Tissue homogenates (trachea, lungs, liver, kidney) pooled from 20 chicken.

Modified Novobead can remove all nucleic acids from any sample

Novobead with additional cross-linking agents enables quick and complete removal of all nucleic acids from cell lysates or other complex mixtures, as demonstrated by negative real time PCR and RT-PCR results after 50 cycles.

DISCOVER HOW FAR YOU CAN PUSH THE BOUNDARIES OF YOUR PCR DIAGNOSTICS WITH NOVOBEAD

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