MOLECULARLY IMPRINTED POLYMERS

Affinity reagents which break the mould...

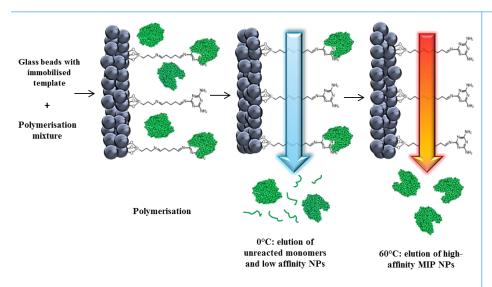
Molecularly Imprinted Polymers (MIPs) are synthetic materials capable of selective recognition and binding of their target species, similarly to natural antibodies. This is done without limitations of scaffolds and, with over 5,000 different monomer options, the possibilities are endless.

Our team members are world leaders in their field and have been created MIPs to a huge range of targets including **drugs**, **metabolites**, **peptides**, **proteins**, **toxins** and **viruses**. Unlike antibodies, the options are not limited only to targets that produce an immune response.



Automated MIP synthesis using patented MIP Diagnostics chemistry and hardware

MIP DIAGNOSTICS NOW PROVIDES A CUSTOM SERVICE TO DESIGN AND CREATE MIPS TO MEET YOUR SPECIFIC NEEDS



Scheme of our patented synthesis of MIP nanoparticles, exploiting the chemical immobilisation of the template molecule on a solid-support, which allows to selectively collect onyl high affinity MIPs

Advantages:

- Can be produced against virtually any target
- Typical nM affinity (K_D)
- Cost effective
- Bespoke functionalization possible
- Stable at extremes of pH and in organic solvent
- Automated synthesis: low batch to batch variability
- Ready in 2 weeks

BE IMPRESSED

Contact our team to discuss your requirements or simply to find out more about MIPs.

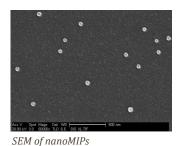


e-mail: enquiries@mip-dx.com call: +44 (0) 843 289 1703 visit: www.mip-dx.com

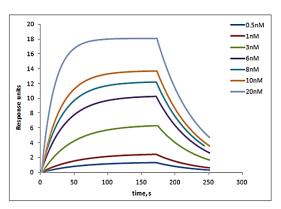
Rapid, Reliable and Robust diagnostics

Being made of synthetic polymers, MIPs can withstand harsh chemical environments, such as extremes of pH, seawater or high concentrations of organic solvents. MIPs have a very long shelf life at room temperature which makes them ideal when the cold chain cannot be guaranteed.





Excellent recognition properties have been achieved for small molecules, peptides and whole proteins. MIPs can be also modified with different functionalities (fluorescent, electrochemical, magnetic).



Representative SPR graph of nanoMIPs imprinted for a peptide . In this case the Kd is calculated at 6.7nM

Other applications of MIPs include sensors, imaging, selective targeting of membrane proteins in cells and drug delivery.

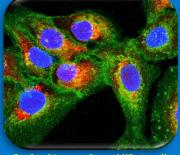
The proprietary nanoMIP design and development process enables MIP diagnostics to provide quality controlled nanoMIPs in just TWO WEEKS of receiving the target

No immune response is required and no animals are used in the manufacture of MIPs



TEM of nanoMIPs inside a cell

Furthermore, MIPs have proven to be biocompatible and internalized in cells, thus opening opportunities in biomedical areas.



Confocal image of nanoMIPs in cells



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A spin out company from the



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