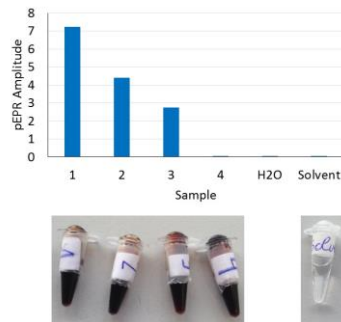


Selectivity

The pEPR method is selective for the magnetic nanoparticles, and not for iron-salts or endogenous iron molecules present in the biological tissues or fluids.



Sample 1,2,3,4: mixture of iron-salts and iron oxide nanoparticles
Sample H₂O and Solvent: pure water and pure solvent

All samples were analyzed with pEPR.

The pEPR amplitude for sample 4 containing only iron-salts was similar to the pEPR amplitude for pure water or pure solvent.

And the pEPR amplitude of sample 1, 2 and 3 was correlated with the amount of nanoparticles present in these samples.