



# INTRODUCING MAGNETIC CAPTURE PCR IN SERBIA

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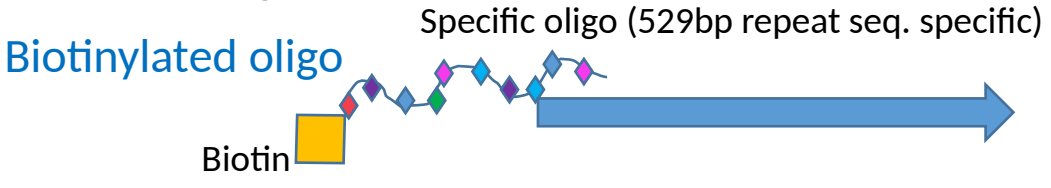
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# MC PCR: How it works and why it works

## Basic building blocks:

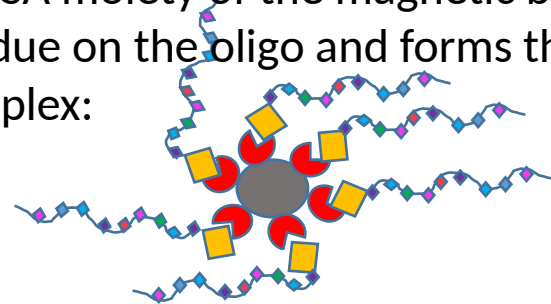


The oligo 'finds' its complementary sequence (529bp RE of *T. gondii*) and hybridizes to it

## Streptavidin coated magnetic bead



The SA moiety of the magnetic bead binds the biotin residue on the oligo and forms the SA-bead-B-oligo complex:



Any *T. gondii* DNA which has hybridized to the oligo will be attached to the complex. The beads can then be easily removed from solution(s) and transferred to other solutions using a magnet.

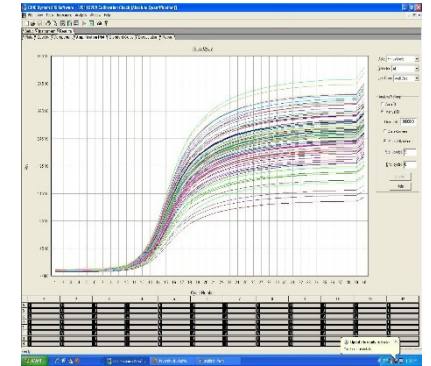
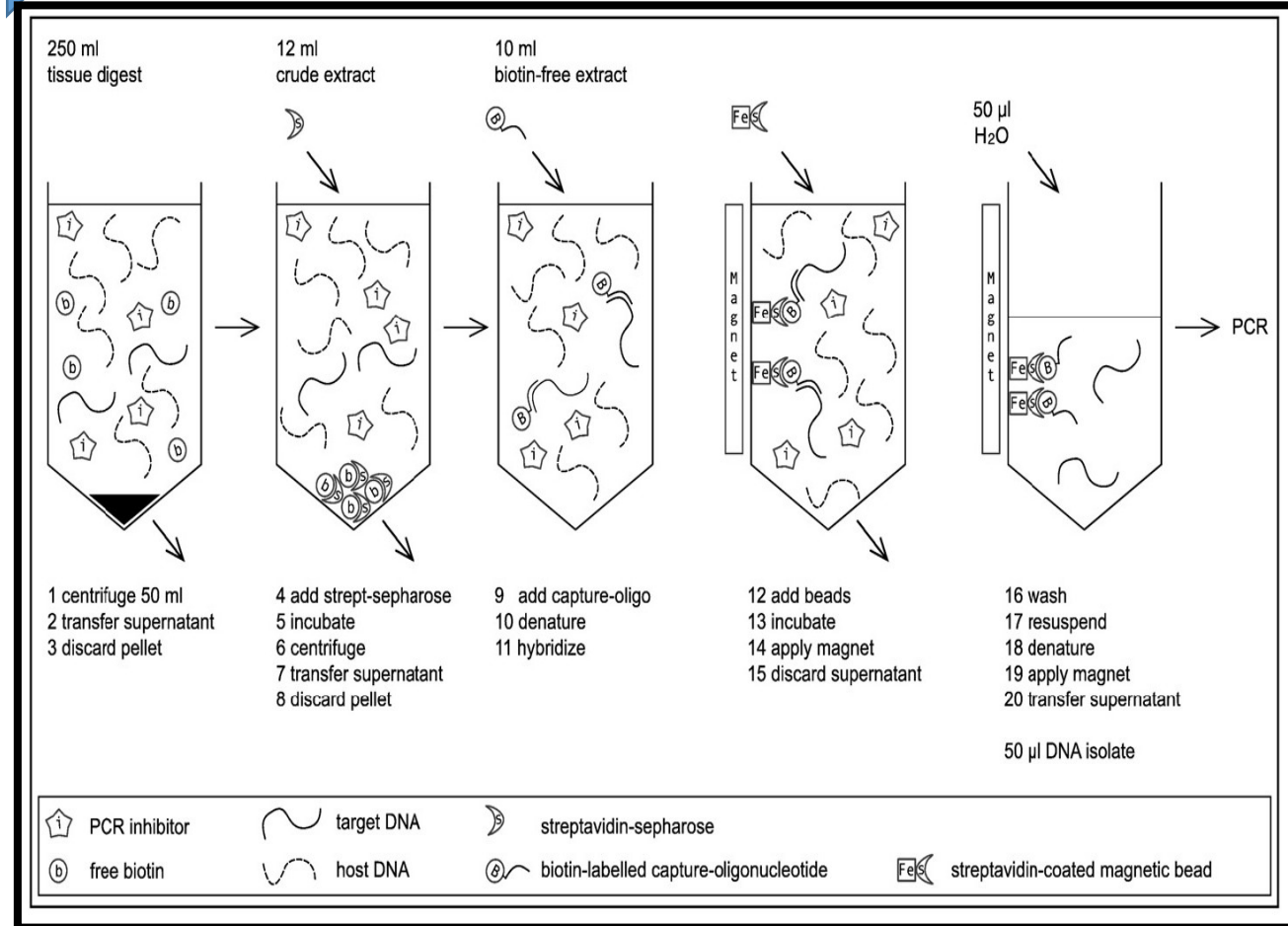


# MC-PCR: Protocol overview

Sample processing/prep

Magnetic capture of DNA

Real time PCR



Opsteegh M, Langelaar M, Sprong H, den Hartog L, De Craeye S, Bokken G, Ajzenberg D, Kijlstra A, van der Giessen J. (2010) Direct detection and genotyping of *Toxoplasma gondii* in meat samples using magnetic capture and PCR. Int. Journal of Food Microbiol, 139:193-201