

Schematic representation of the reaction progress:

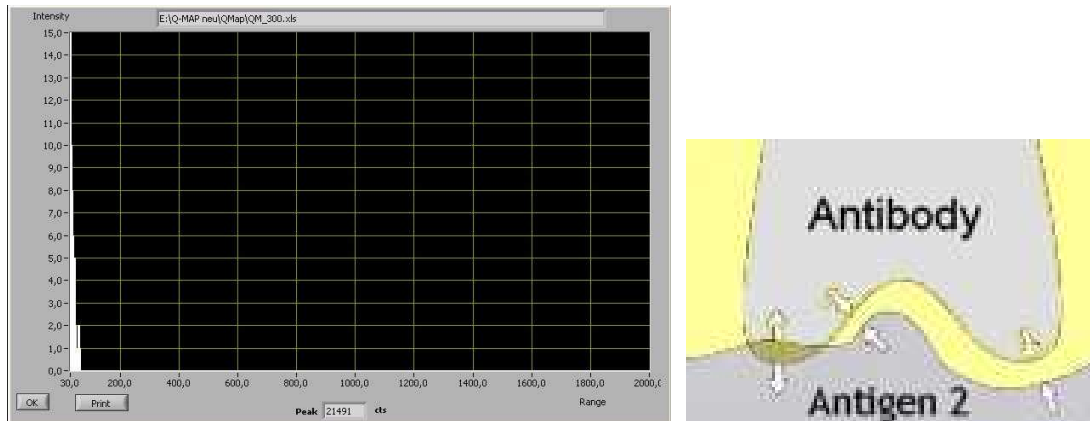


fig. 1

This image shows the reaction progress where no antigen-antibody-reaction took place.

x-axis = particle size ; y-axis = particle amount

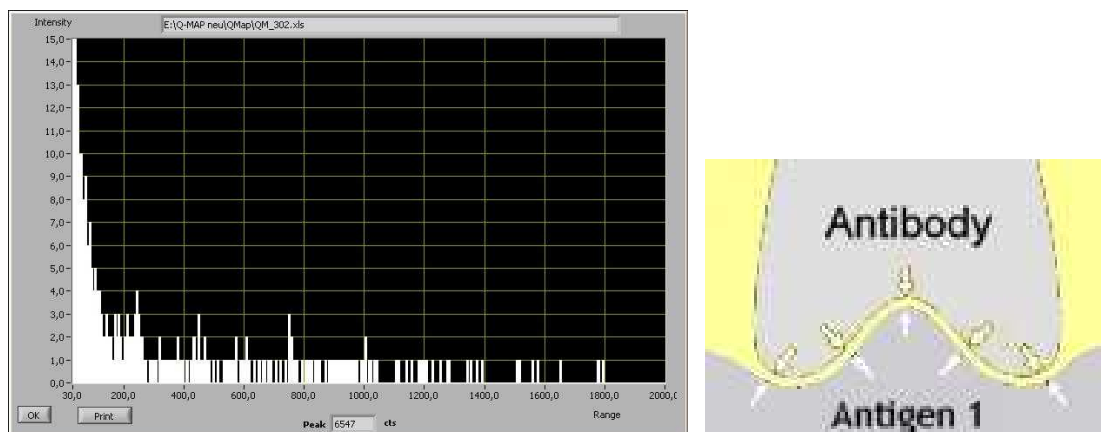


fig. 2

This picture shows an antigen-antibody-reaction of a sample after 60 seconds measurement time.

1. The evaluated signals show only particles which diameters are smaller than the related filter size (figure 1).
2. After a filtered antibody solution reacts with an antigen solution, microprecipitates of different sizes occur. If the microprecipitates reach a size that lies above the related filter size, they become as a newly emerged particle visible. The amount and sizes of these particles are determined over transition time measurement in the laser focus and are represented graphically online (figure 2).

Q-MAP :

Specific antibodies, bound on magnetic micro- and nano-particles, were sent together with the sample through PTFE- (Teflon) pumps and valves into the flow-through measurement cell and are analyzed.

The user inserts a chip card into the card reader (under the touch screen) and so activates the measurement method. Then you put the PTFE-sample-tube into the sample and push the start-button - the rest runs automatically.

Our self-developed autosampler can help to handle large amounts of samples. A special sample preparation is not necessary.

Several times through a day the Q-MAP machine is able to run a self-check using positive- and negative samples. After each measurement the machine is cleaning itself fully automatically within a few minutes.

The ready to use antibody-solutions are cooled in a small peltier-cooling system and are enough for thousands of measurements. So you don't need a daily antibody preparation or handling (in and out of a refrigerator).

Measurement system and peltier-cooling system need only 12 V, so even a battery run is possible in an outside use.

