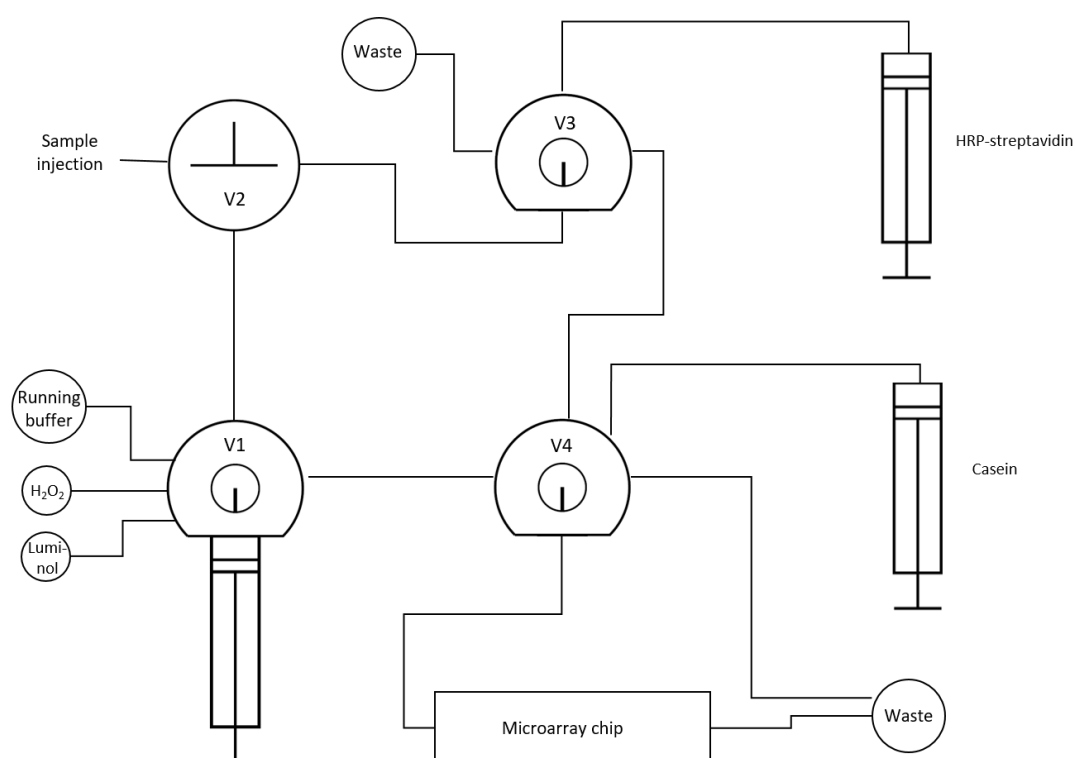


## Supplementary information



**Figure S1:** Schematic fluidic plan of the MCR-R. The positions and lengths of the tubing is just for demonstration purposes.

**Table S1:** Pathway for reagents during the measuring program on the MCR-R.

Process	Pathway
Sample	Running buffer – V1 – V2– V3 – V4 – Chip – Waste
Wash chip	Running buffer – V1 – V2– V3 – V4 – Chip – Waste
Blocking	Casein – V4 – Chip – Waste
HRP-streptavidin	HRP-streptavidin – V3 – V4 – Chip – Waste
CL-reagents	Hydrogen peroxide – V1 + Luminol – V1 – V4 – Chip – Waste
Flush device “Sample way”	Running buffer – V1 – V2 – V3 – V4 – Waste
Flush device “Sample loop”	Running buffer – V1 – V2 – V3 – Waste
Flush device “Chip”	Running buffer – V1 – V4 – Chip – Waste