

Table S1: Measurement steps

action	volume/direction	flow rate
aspiration of water	100 µL/holding coil	50 µL s <sup>-1</sup>
aspiration of air	10 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of hydrogen peroxide	40 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of air	10 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of luminol	40 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of air	10 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of hexacyanoferrate	10 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of air	10 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of antioxidant (sample) or water (blank)	50 µL/holding coil	30 µL s <sup>-1</sup>
aspiration of air	10 µL/holding coil	30 µL s <sup>-1</sup>
dispensing	empty/detection cell	50 µL s <sup>-1</sup>
<b>stop-flow</b>	<b>60 s/scanning of the CL signal</b>	<b>0 µL s<sup>-1</sup></b>
aspiration of reagent mixture	300 µL/holding coil	60 µL s <sup>-1</sup>
dispensing	empty/waste	60 µL s <sup>-1</sup>
aspiration of washing solvent (water)	500 µL/holding coil	60 µL s <sup>-1</sup>
dispensing	250 µL/detection cell	50 µL s <sup>-1</sup>
aspiration of the detection cell content	300 µL/holding coil	60 µL s <sup>-1</sup>
dispensing	empty/waste	60 µL s <sup>-1</sup>