

A Regenerable ImmunoChip for the Rapid Determination of 13 Different Antibiotics in Raw Milk

Katrin Kloth,^a Maria Rye-Johnsen,^a Andrea Didier,^b Richard Dietrich,^b
Erwin Märtlbauer,^b Reinhard Niessner^a and Michael Seidel^{*a}

^aInstitute of Hydrochemistry and Chair for Analytical Chemistry, Technische Universität München, Marchioninistrasse 17, D-81377 München, Germany.

E-mail: michael.seidel@ch.tum.de; Fax: +49 89 218078255; Tel: +49 89 218078238

^bChair of Hygiene and Technology of Milk, Ludwig-Maximilians-Universität München, Schönleutnerstrasse 8, D-85764 Oberschleissheim, Germany.



Figure S1 Image of the multianalyte detection instrument Munich Chip Reader (MCR 3).

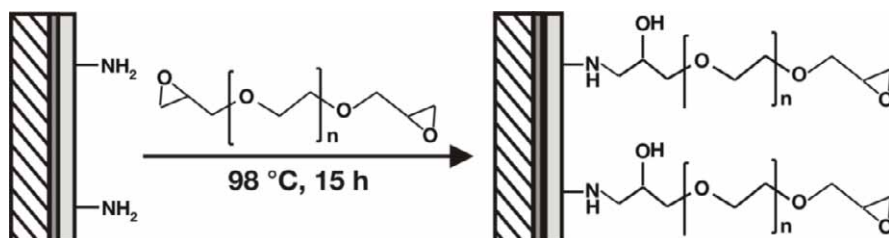
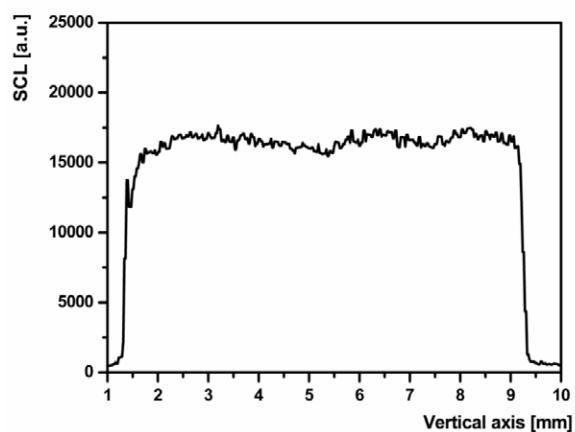
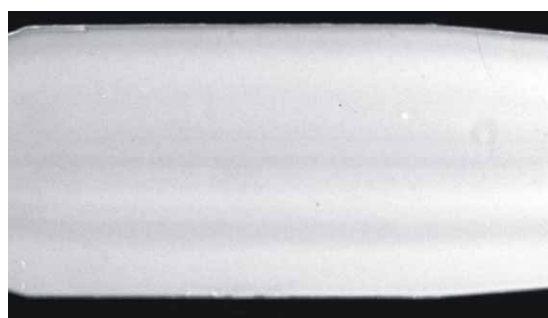


Figure S2 Schematic of the preparation of uniform PEG-layers with a terminal epoxy-function.

(A)



(B)

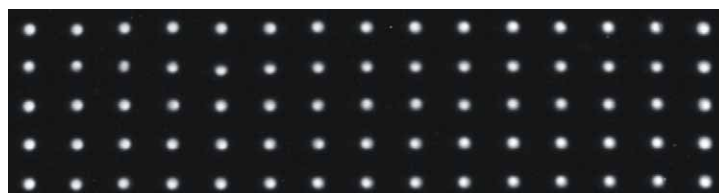
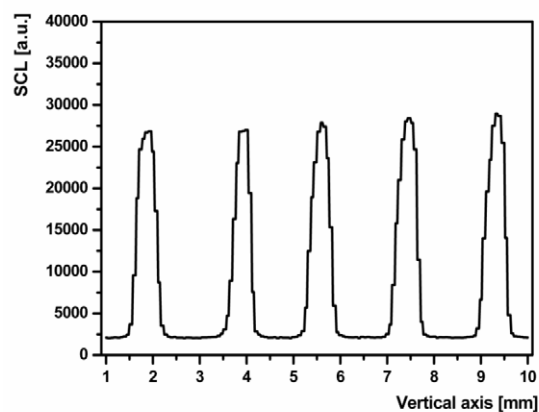
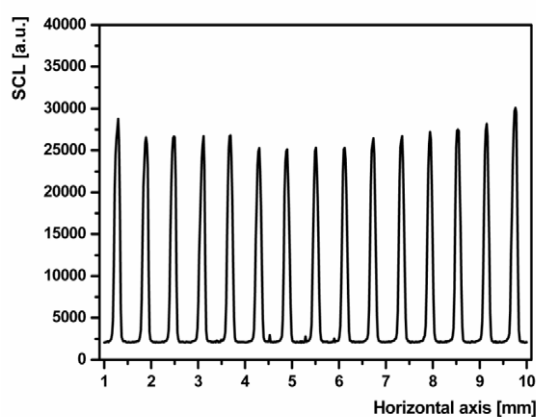


Figure S3 Grafted DAPEG surface treated with biotin-NHS (A) over the whole surface and (B) plotted a 15 x 5 array (spot diameter 450 μm). Quality control by a chemiluminescence reaction of horseradish peroxidase. CCD exposures of the active area.

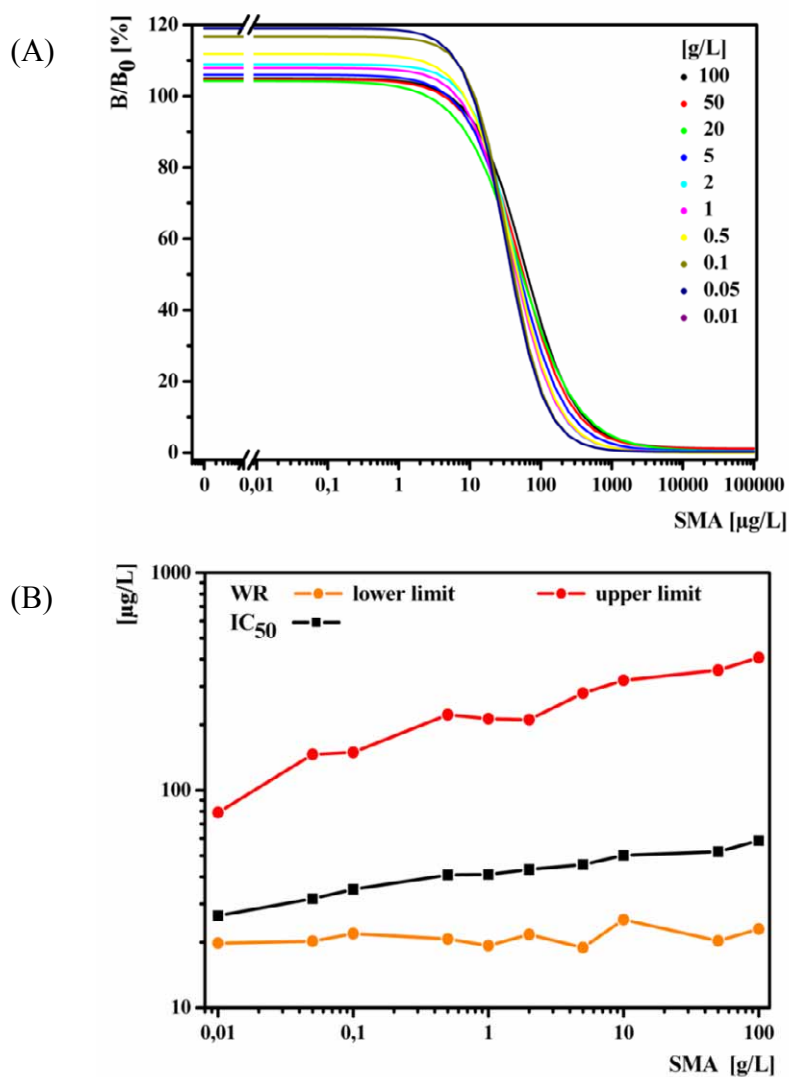


Figure S4 (A) Standard calibration curves ($m = 5$, $n = 9$, $r^2 = 0.97$) and (B) the progression of IC_{50} values and working range limits for SMA immobilized with different concentration (0.01 - 100 g/L) on an epoxy-activated PEG chip surface.