A-Amylase immobilization on amidoximated acrylic microfibers activated by cyanuric chloride

Yaaser Q. Almulaiky^{1,2}, Faisal M. Aqlan³, Musab Aldhahri^{4,5}, Mohammed Baeshen⁶ Tariq Jamal Khan⁷, Khalid A. Khan⁸, Mohammed Afifi^{6,9}, Ammar AL-Farga¹, Mohiuddin Khan Warsi¹, Mohammed Alkaled⁶, Aisha A.M. Alayafi⁶

Supplementary Figure 4

Number of repeated reaction	Residual activity %	Residual units	OD at 560 nm n/3
1	100	12.6	1.380
2	95	11.97	1.311
3	92	11.59	1.2696
4	84	10.58	1.1592
5	80	10.08	1.104
6	78	9.83	1.0764
7	77	9.69	1.0626
8	77	9.67	1.060
9	72	9.07	0.993
19	72	9.07	0.991

Supplementary Figure 4 Reuse of immobilized α-amylase. Reusability tests of the immobilized a-amylase were carried out by addition of reaction mixture contained 1ml of 50 mM sodium acetate buffer, pH 5.5, 1ml of starch (1%) and 1cm2 immobilized enzyme. The reaction stopped

¹Department of Biochemistry, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia

²Chemistry Department, Faculty of Applied Science, Taiz University, Taiz, Yemen

³Chemistry Department, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia

⁴Department of Biochemistry, Faculty of Science, King Abdulaziz University, Jeddah, Saudi Arabia

⁵Center of Nanotechnology, King Abdulaziz University, Jeddah, Saudi Arabia

⁶Department of biology, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia

⁷Stem Cell P2 Laboratory, The Center for Reproductive Medicine, Shantou University Medical College, Shantou, 515041, People's Republic of China

⁸Chemistry Department, Faculty of Science, King Abdulaziz University, Jeddah, Saudi Arabia

⁹Biochemistry Department, Faculty of Veterinary Medicine, Zagazig University, Egypt

by the addition of 1ml DNS reagent, followed by incubation in a boiling water bath for $10\,\mathrm{min}$ followed by cooling. The absorbance was recorded at $560\,\mathrm{nm}$.