

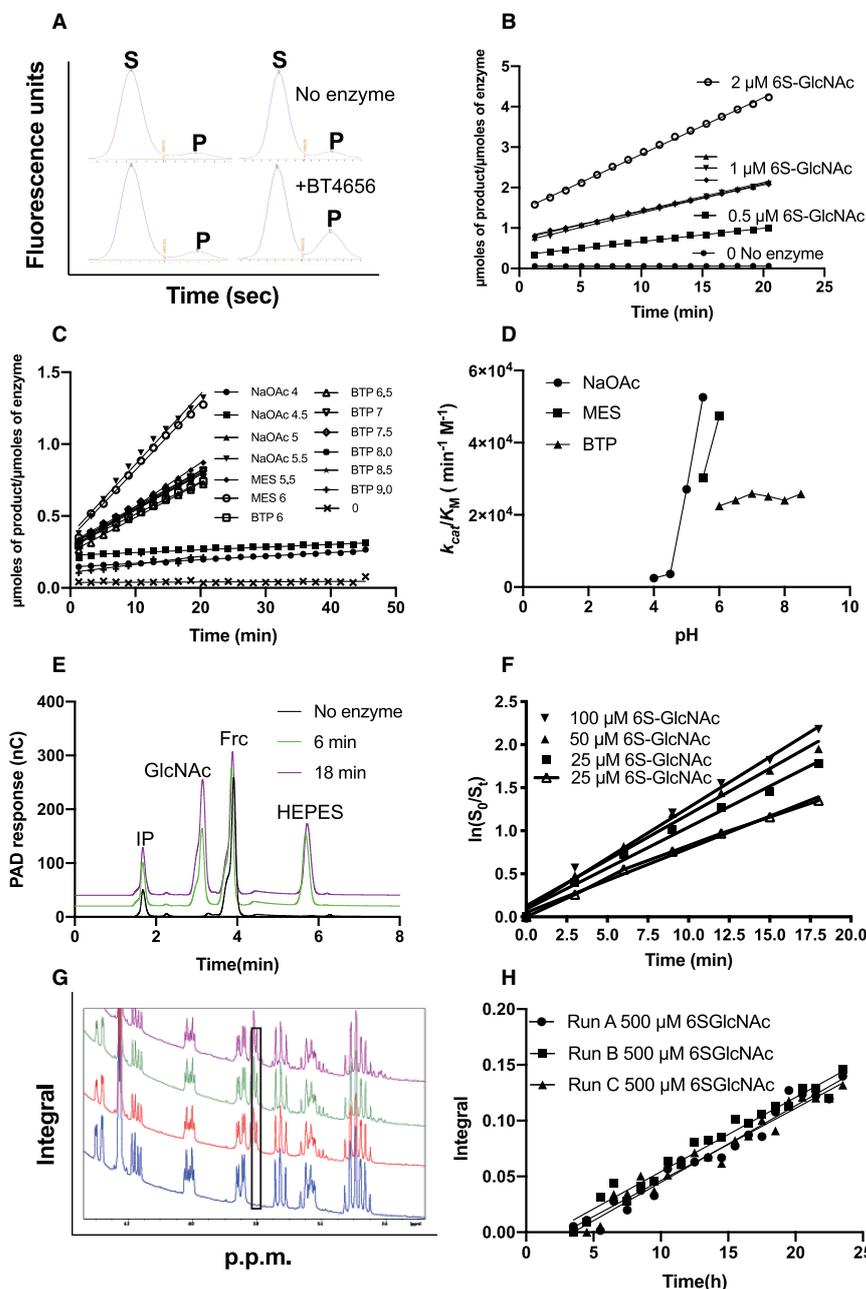
# Correction: Mobility shift-based electrophoresis coupled with fluorescent detection enables real-time enzyme analysis of carbohydrate sulfatase activity

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The authors would like to make the following corrections to their article. The equation appearing in the section ‘A novel microfluidic-based desulfation assay’ of the Methods, should appear as  $V_0 = (k_{cat}/K_M)[S][E]$ . The y-axis in [Figure 2H](#) should be ‘Integral’. The corrected version can be seen below. The footnote in Table 1 should read “The table list the kinetic values and the corresponding amount of resources required in terms of time and components. \*Indicates value is a specific activity ( $\text{h}^{-1}$ ). All experiments represent technical triplicates.” The authors apologise for any confusion caused by these errors.

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**Figure 2. Side-by-side comparison of enzyme activity and kinetic data calculated using capillary electrophoresis (CE) and microfluidics, HPAEC or NMR.**

(A) Raw capillary electrophoresis data outputs generated by the PerkinElmer EZ Reader II software. S indicates sulfated substrate peak and P desulfated product peak, a snapshot of an identical time point is shown in the presence and absence of the sulfatase; (B)  $k_{cat}/K_M$  determinations calculated using capillary electrophoresis coupled to fluorescence detection, using 100 nM BT4656S1\_11; (C) linear rates produced at a range of pH values to determine the pH optimum for BT4656 using 1  $\mu$ M substrate and 350 nM BT4656S1\_11; (D)  $k_{cat}/K_M$  determination produced from C plotted against pH; (E) Raw data from HPAEC chromatograms, IP = injection peak, GlcNAc = N-acetylglucosamine product produced by BT4656S1\_11, Frc = Fructose used as an internal standard to enable accurate quantification between runs and HEPES indicates dialysis buffer 'contamination'; (F)  $k_{cat}/K_M$  determinations produced using HPAEC coupled to PAD using 800 nM BT4656S1\_11; (G) Raw integrals from NMR experiment using 500  $\mu$ M substrate and 10 nM BT4656S1\_11; (H) Specific activity produced from raw NMR data presented in G, the black box indicates the appearance of a desulfated O6 product, which increases with time.