## Supporting information

# Unprecedented affinity-labelling of carbohydrate-binding proteins with *s*-triazinyl glycosides

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2-(*N*-(2-aminoethyl)-4-azido-tetrafluorobenzamide)-4-chloro-6-(prop-2-ynyloxy)-1,3,5triazine (2)



<sup>1</sup>H NMR of 2-(*N*-(2-aminoethyl)-4-azido-tetrafluorobenzamide)-4-chloro-6-(prop-2-ynyloxy)-1,3,5-triazine (2) (298 K, CD<sub>3</sub>OD)



Proton decoupled <sup>13</sup>C NMR of 2-(*N*-(2-aminoethyl)-4-azido-tetrafluorobenzamide)-4-chloro-6-(prop-2-ynyloxy)-1,3,5triazine (2) (298 K, CD<sub>3</sub>OD)



Fluorine decoupled <sup>13</sup>C NMR of 2-(*N*-(2-aminoethyl)-4-azido-tetrafluorobenzamide)-4-chloro-6-(prop-2-ynyloxy)-1,3,5-triazine (2) (298 K, CD<sub>3</sub>OD)



Proton decoupled <sup>19</sup>F NMR of 2-(*N*-(2-aminoethyl)-4-azido-tetrafluorobenzamide)-4-chloro-6-(prop-2-ynyloxy)-1,3,5triazine (2) (298 K, CD<sub>3</sub>OD)

## 2-Chloro-4-(furan-2-ylmethylamino)-6-(prop-2-ynyloxy)-1,3,5-triazine (3)



<sup>1</sup>H NMR of 2-chloro-4-(furan-2-ylmethylamino)-6-(prop-2-ynyloxy)-1,3,5-triazine (3) (298 K, CDCl<sub>3</sub>)



<sup>13</sup>C NMR of 2-chloro-4-(furan-2-ylmethylamino)-6-(prop-2-ynyloxy)-1,3,5-triazine (3) (298 K, CDCl<sub>3</sub>)



<sup>1</sup>H NMR of CO-V glycoprobe (4) (298 K, D<sub>2</sub>O)



<sup>19</sup>F NMR of CO-V glycoprobe (4) (298 K, D<sub>2</sub>O)





FucLac glycoprobe (6)



<sup>1</sup>H NMR FucLac glycoprobe (6) (298 K, D<sub>2</sub>O)



<sup>13</sup>C NMR FucLac glycoprobe (6) (298 K, D<sub>2</sub>O)



<sup>9</sup>F NMR of FucLac glycoprobe (6) (298 K, D<sub>2</sub>O)

FucLac glycoprobe (7)



<sup>13</sup>C NMR of FucLac glycoprobe (7) (298 K, D<sub>2</sub>O)



<sup>1</sup>H NMR of glycoprobe (7) in D<sub>2</sub>O (1) and in deuterated phosphate buffer (pH 7.0, 100 mM) over 48 hours (2-6 : 1, 2, 4, 8, 48h respectively).

### WGA labelling by glycoprobe (5) in presence of excess of CO-V

![](_page_12_Figure_1.jpeg)

Glycoprobe **5** (5  $\mu$ M) was incubated with WGA (0.1 mg/mL) in PBS buffer (60 mM, pH 7.2, 150 mM NaCl, 0.1 mM MnCl<sub>2</sub>, 0.1 mM CaCl<sub>2</sub>) in absence and in presence of **CO-V** (200  $\mu$ M) and then labelled with FITC-N<sub>3</sub>. After SDS-PAGE, WGA was detected by Coomassie blue staining (A) and by fluorescence detection (B)

### Reactivity of glycoprobes (5) and (7) with butylamine

![](_page_12_Figure_4.jpeg)

ESI spectrum of the reaction mixture after 48 hours at RT of glycoprobe (5) in presence of 100 equivalents of butylamine in water

![](_page_13_Figure_0.jpeg)

ESI spectrum of the reaction mixture after 48 hours at RT of glycoprobe (7) in presence of 100 equivalents of butylamine in water

![](_page_13_Figure_2.jpeg)

ESI spectrum (zoom in between 650-850 m/z) of the reaction mixture after 48 hours at RT of glycoprobe (7) in presence of 100 equivalents of butylamine in water