

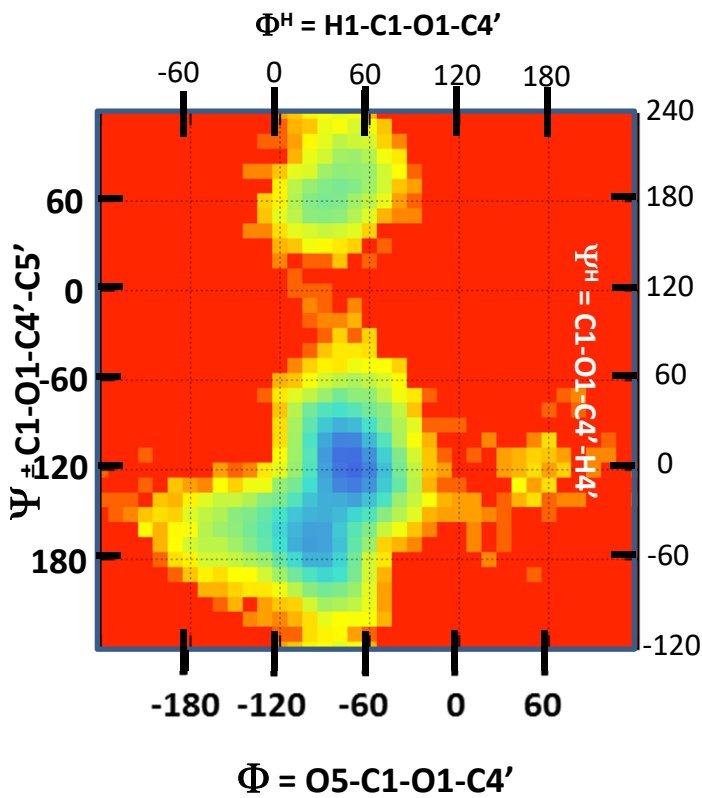
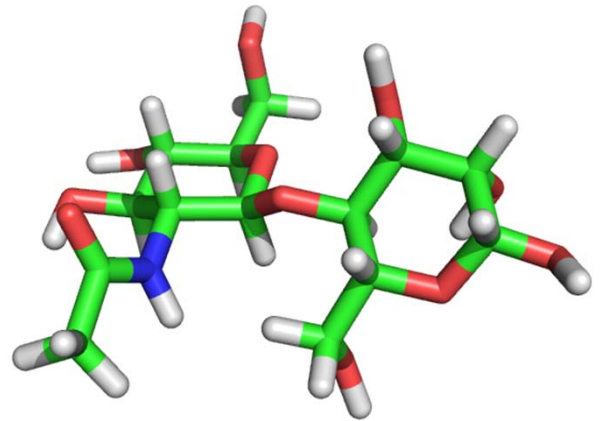
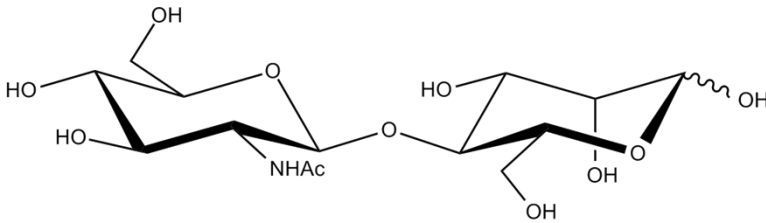
$\beta$ -D-GlcNAc 1-4 D-Manp



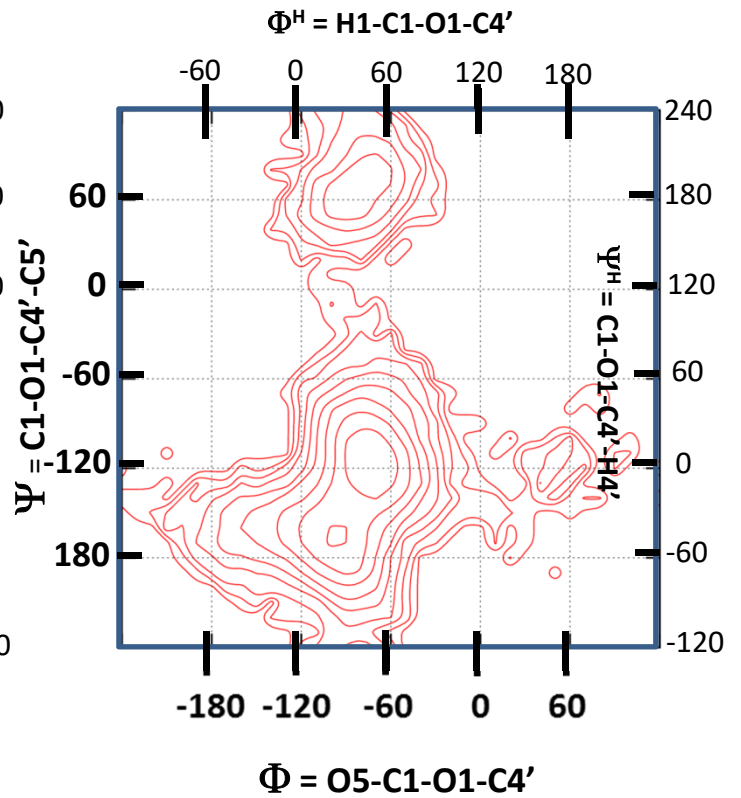
$\beta$ 1-4



GlcNAc  $\beta$ 1-4 Man



- Conf 1 ( $\Phi, \Psi$ ) = -80; -120
- Conf 2 ( $\Phi, \Psi$ ) = -100; -160
- Conf 3 ( $\Phi, \Psi$ ) = -90; 60
- Conf 4 ( $\Phi, \Psi$ ) = 60; 60



- Conf 1 ( $\Phi^H, \Psi^H$ ) = 40; 0
- Conf 2 ( $\Phi^H, \Psi^H$ ) = 20; -40
- Conf 3 ( $\Phi^H, \Psi^H$ ) = 30; 180
- Conf 4 ( $\Phi^H, \Psi^H$ ) = 0; 180