

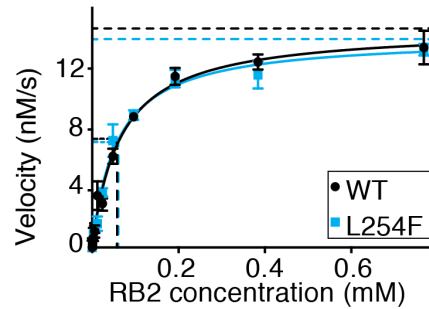
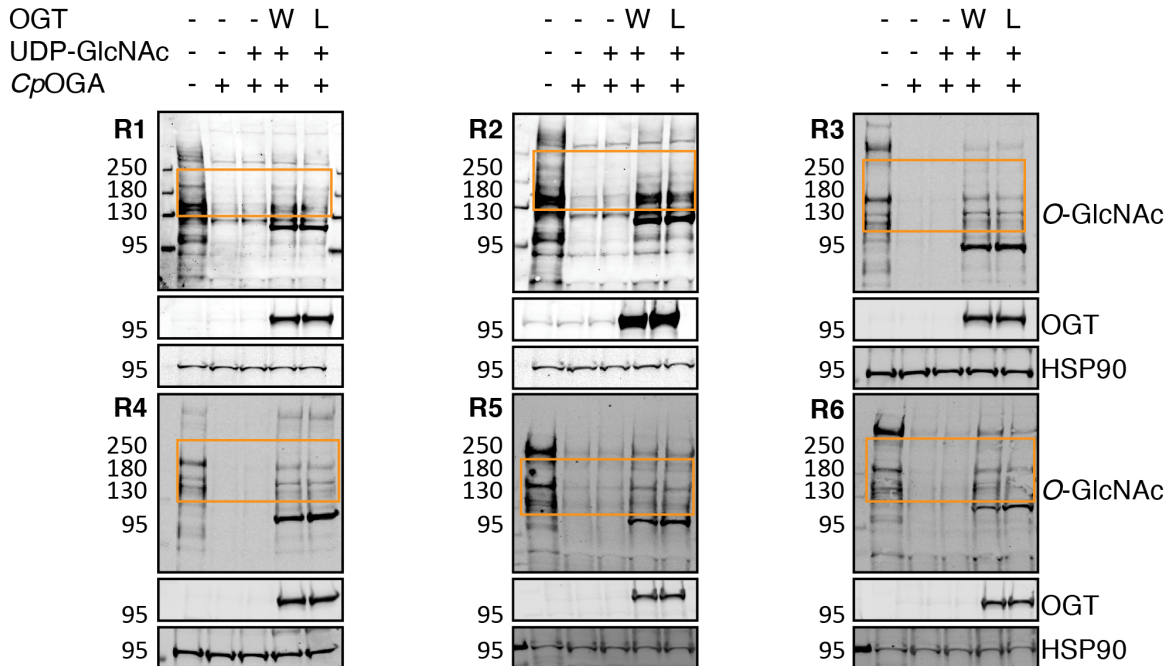
Cell Chemical Biology, Volume 25

Supplemental Information

The O-GlcNAc Transferase Intellectual Disability

Mutation L254F Distorts the TPR Helix

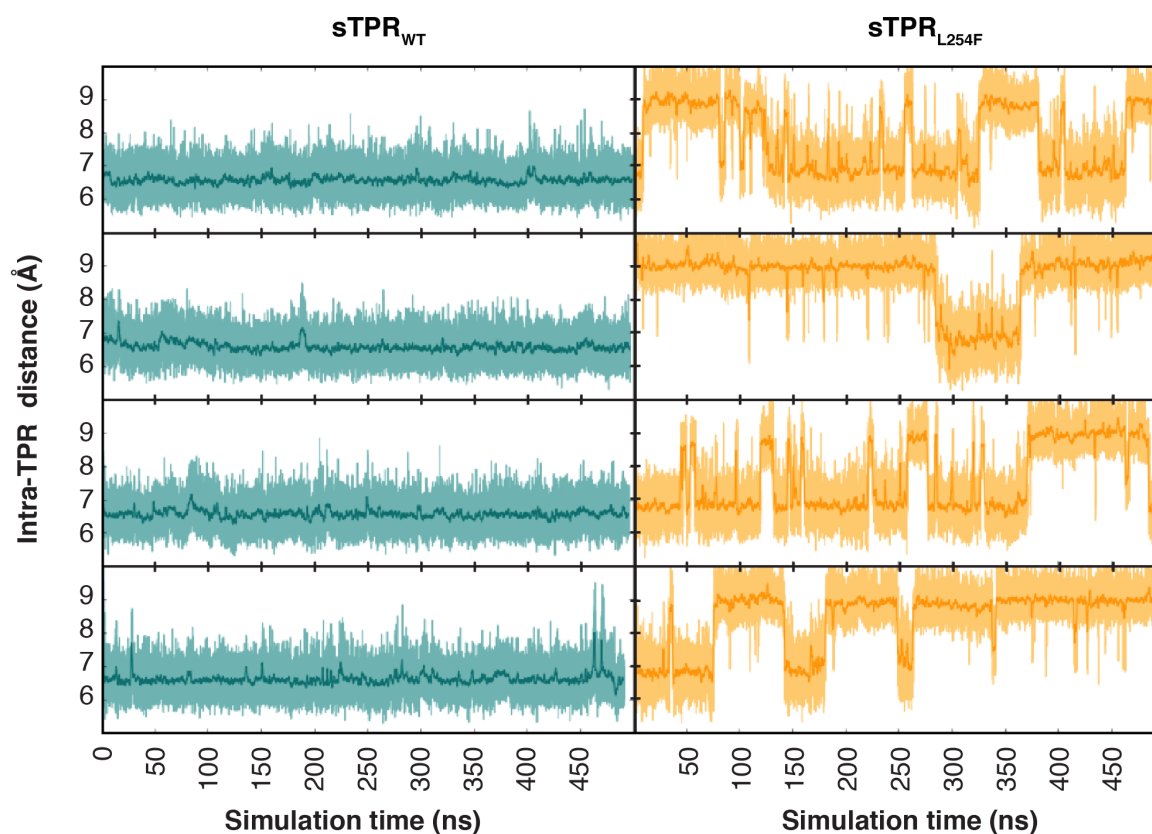
Mehmet Gundogdu, Salomé Llabrés, Andrii Gorelik, Andrew T. Ferenbach, Ulrich Zachariae, and Daan M.F. van Aalten

A**B**

Supplemental figure 1: *in vitro* characterisation of OGT_{L254F}. Related to Figure

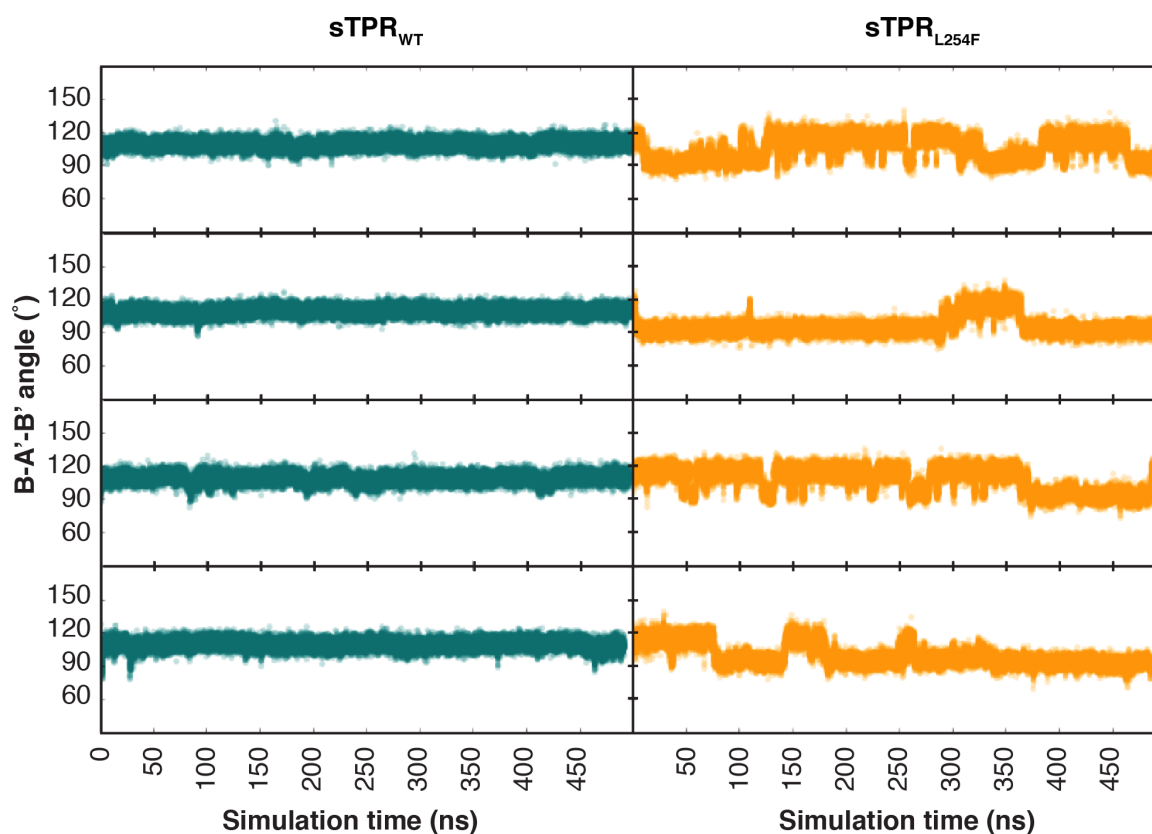
1B

(A) Michaelis-Menten kinetics of OGT wild type and mutant against RB2 peptide. X- and y-axis intercepts of the dashed lines mark the Michaelis constant (K_M) and maximum velocity (V_{max}) of the reaction. Error bars represent standard deviation of three replicates. **(B)** Western blot analyses showing OGT activity against de-O-GlcNAcylated HEK-293 cell lysate. Results represent six biological replicates and orange boxes depict the area that was used for quantification. CpOGA: *Clostridium perfringens*; L: L254F; W: wild type.



Supplemental figure 2: Analysis of the intra-TPR repeat distance. Related to Figures 2B and 2C

Molecular dynamics simulation data investigating the intra TPR distance observed in sTPR_{WT} and sTPR_{L254F} are shown on left and right panels, respectively. sTPR: simplified TPR; TPR: tetratricopeptide repeat.



Supplemental figure 3: Analysis of the angle B-A'-B'. Related to Figures 2B and 2C

Molecular dynamics simulation data investigating the B-A'-B' angle observed in sTPR_{WT} and sTPR_{L254F} are shown on left and right panels, respectively. sTPR: simplified TPR; TPR: tetratricopeptide repeat.