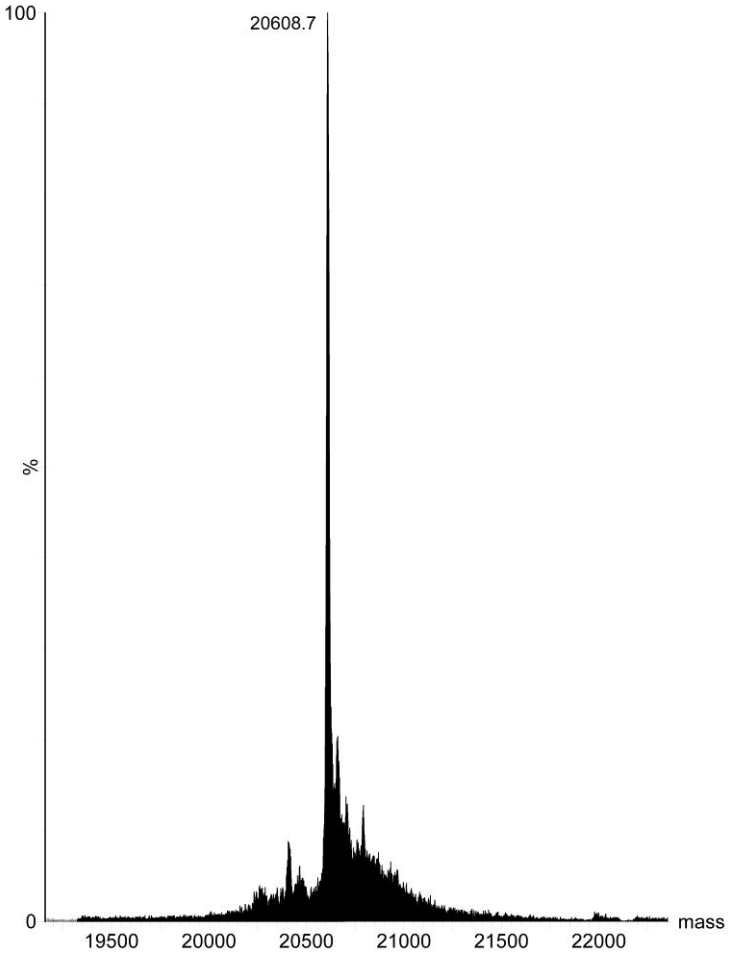
Supplementary Material



Supplementary Figure S1. Convoluted mass spectrum (ESI-MS) of GlcT RBD-PRDI. The theoretical mass expected for our expression construct in the absence of phosphorylation is 20606.75 Da. For the measurement the source capillary was set to 2.94 kV. Scans were acquired in positive-ion mode at *m/z* 500 – 2500.

Supplementary Figure S2. GlcT RBD-PRDI protein binds specifically to RAT RNA. The native gel retardation assay on an 8% polyacrylamide gel was stained with ethidium bromide. lane 1: a 33mer RNA oligonucleotide containing the RAT sequence (180 µmol), lane 2: RBD-PRDI protein (195 nmol), lane 3: reaction mix of RBD-PRDI protein with the RAT RNA (117 nmol/108 µmol (protein/RNA)), lane 4: reaction mix of RBD-PRDI protein with the RAT RNA (58.5 nmol/54 µmol (protein/RNA)), lane 5: 24mer U4 Spliceosome RNA that should not be bound by the RBD of GlcT (100 µmol), lane 6: reaction mix of RBD-PRDI protein with the 24mer RNA (195 nmol/100 µmol (protein/RNA)). The sample buffer was 10 mM Tris/HCl, pH 8.0, 200 mM NaCl, 2 mM DTT. The gel was run in 1 x Tris-borate/EDTA buffer at 5 to 8 V/cm at room temperature for 5 hours, followed by staining with ethidium bromide. The sequence of the RNA oligonucleotide containing the RAT recognition site is 5' GGACGUGUUACUGAUUCGAUCAGGCAUGAGUCC 3'. The sequence of the 24mer U4 Spliceosome RNA is 5’ GGCCAAUGAGGUUUAUCCGAGGCC 3’.