



**Supplementary information, Figure S1** Competition assay of PXY<sup>LRR</sup> by GST-TDIF in the absence (-) or presence of excess synthetic TDIF or its mutants. The mixture containing chemically synthesized wild-type TDIF or its mutants and the purified PXY<sup>LRR</sup> was flowed through GS4B resin bound by GST-TDIF, respectively. After extensive washing, the GS4B resin-bound proteins were analyzed by SDS-PAGE and detected by Coomassie blue staining. 13R had an additional arginine added at the C terminus of TDIF.