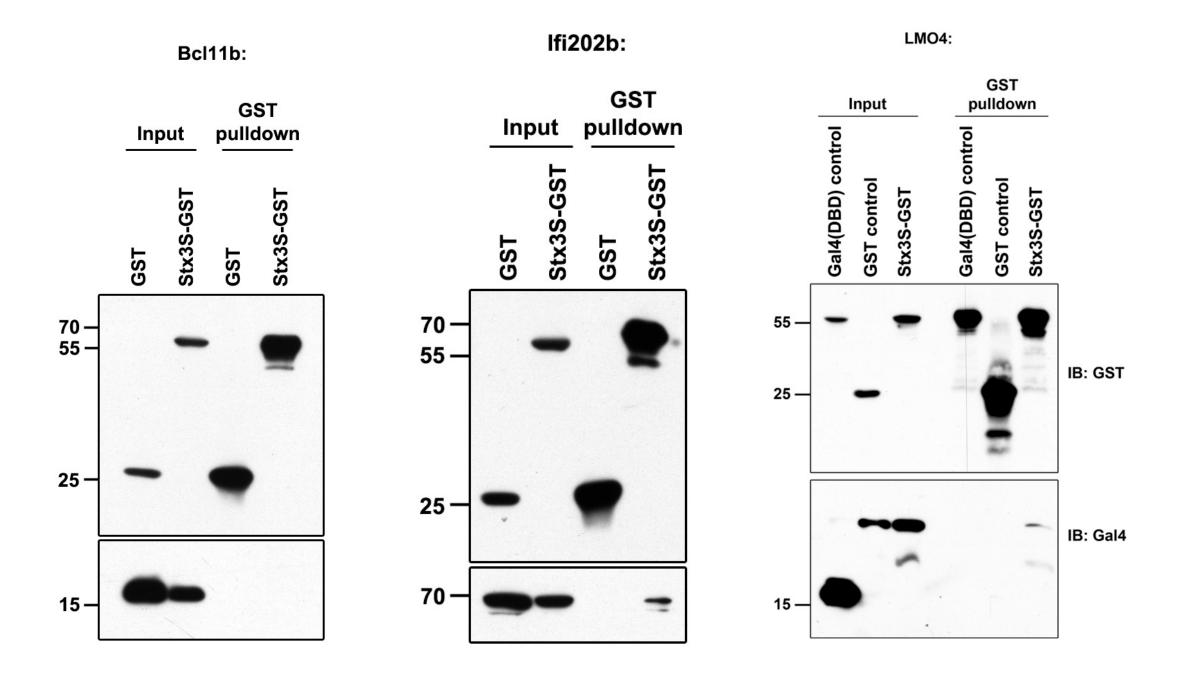
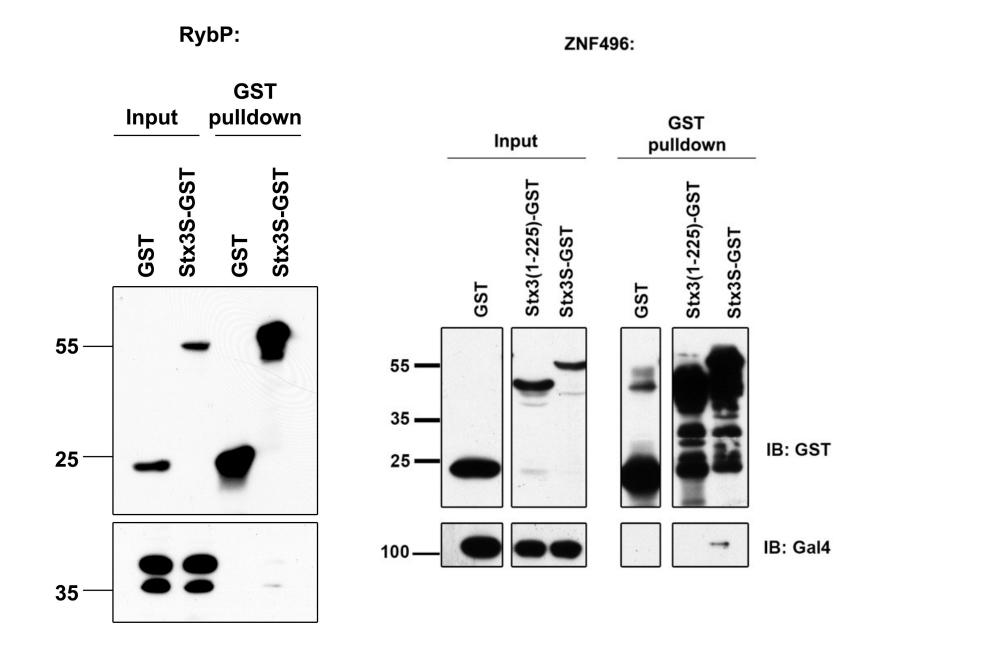
## **Supplemental Figure Legends**

- Fig. S1. Identification of RanBP5 as interacting protein via mass spectrometry, and Stx3 constructs. (A) Table showing RanBP5 tryptic-digested peptides co-immunoprecipitated with Stx3. Peptides identified by LC-MS/MS.
- **Fig. S2.** Confirmation of binding to candidate co-activator proteins. GST-Stx3S and Gal4 or Gal4-candidate protein were co-expressed in HEK293T cells and lysates subjected to precipitation via glutathione-coated sepharose. Lysates and bead precipitates were subjected to SDS-PAGE and immunoblotted for Gal4 or GST.
- **Fig. S3. Candidate shRNA oligonucleotides. (A)** Alignment of the exon 9 exon 11 junction with candidate shRNA oligonucleotides. Each oligonucleotide is 21bp long and predicted to silence Stx3S specifically. **(B)** Immunoprecipitation and immunoblot of HEK293T cells transduced with lentivirus delivering candidate shRNA oligo as indicated.
- **Fig. S4. Cleaved Caspase-3 staining. (A)** Representative immunocytochemistry images of 5-day cultures of SCR or Stx3S KD Caco2 cells stained for cleaved Caspase-3 (green) and DAPI (blue). Scale bar  $20\mu m$ . **(B)** Cleaved Caspase-3 quantification positive proportion for SCR and Stx3S KD cells. Bars represent the means and SEM of quadruplicate samples.

Sequence position	m/z	Peptide sequence
45-53	538.61	ITFLLQAIR
63-70	459.75	QMAAVLLR
111-121	630.81	KICDIAAELAR
112-121	567.08	ICDIAAELAR
242-252	587.25	SLVEIADTVPK
420-439	722.32	YAACNAVGQMQTDFPGFQK
445-460	902.35	VIALLQTMEDQGNQR
500-506	436.65	LQELIQK
560-573	737.95	TIECISLIGLAVGK
682-693	717.07	STACQMLVCYAK
697-708	715.34	EGFVEYTEQVVK
759-778	716.96	AIGTEPDSDVLSEIMHSFAK
965-985	612.92	TKENVNATENCISAVGK





## A

exon 9/exon 11 757 786787		834
GCTGTGAAATACCAGAGTCAGGCCCGGAAGAAACTGATTTCACTCCAGACTGGTGTGGCCACCCTTGTCTTCAGATGA		
C1	GCCCGGAAGAAACTGATTTCA	
C2	CCGGAAGAAACTGATTTCACT	
C3		GCCACCCTTGTCTTCAGATGA
C4	GGAAGAAACTGATTTCACTC	C
C5	CAGGCCCGGAAGAAACTGATT	

