

**S1 Table. Mass spectrometry data from pull-downs of InIP-GST.**

Proteins identified with more than 10 unique peptides from human placental extract pull-downs are outlined below and ordered based on descending molecular weight. Black and blue gels correspond to sections A and B respectively (see Supplementary Figure 1). Afadin is indicated in red. Columns 3-5 correspond to pull-downs from placental extract with InIP-GST. Columns 6-7 show the corresponding total intensities from mass spectrometry data using InIP-GST and GST alone as baits to identify host binding partners in extracts from MDCK cell cultures.

Gene name	Molecular weight (kDa)	Placental extract pull-down		MDCK extract pull-down		
		Unique peptides	Total peptides	Total Intensity InIP-GST	Total Intensity InIP-GST	Total Intensity GST
AHNAK	628.70	54	67	1.2x10 <sup>5</sup>	3.3x10 <sup>6</sup>	1.6x10 <sup>6</sup>
DYNC1H1	532.07	39	54	7.6x10 <sup>5</sup>	1.7x10 <sup>6</sup>	6x10 <sup>4</sup>
COL6A3*	343.66	24	27	2.5x10 <sup>5</sup>	0	0
FLNA	280.56	79	124	1.3x10 <sup>6</sup>	2.9x10 <sup>6</sup>	9.9x10 <sup>5</sup>
FLNB	277.99	29	38	5.7x10 <sup>5</sup>	6.4x10 <sup>6</sup>	3x10 <sup>6</sup>
TPR*	267.29	29	39	6.3x10 <sup>5</sup>	0	0
MYH9	226.39	14	17	1.2x10 <sup>5</sup>	4.1x10 <sup>7</sup>	1.2x10 <sup>7</sup>
AF6	206.68	18	23	5.3x10 <sup>5</sup>	2x10 <sup>6</sup>	0
COL14A1*	193.51	11	12	1.6x10 <sup>5</sup>	0	0
CLTC	191.49	20	26	4.0x10 <sup>5</sup>	9.8x10 <sup>6</sup>	9x10 <sup>6</sup>
IQGAP1	189.13	25	31	3.9x10 <sup>5</sup>	9.6x10 <sup>6</sup>	1.9x10 <sup>5</sup>
TNKS1BP1	181.69	15	19	1.5x10 <sup>5</sup>	7.9x10 <sup>4</sup>	0
FN1*	181.23	11	14	3.4x10 <sup>5</sup>	0	0
KIF5B	109.62	13	15	2.6x10 <sup>5</sup>	4.3x10 <sup>6</sup>	1.9x10 <sup>5</sup>
ACADVL*	70.39	12	16	1.6x10 <sup>6</sup>	0	0
CALD1*	62.66	13	27	3.7x10 <sup>6</sup>	0	0
ANXA1	54.36	12	23	1.2x10 <sup>7</sup>	2x10 <sup>8</sup>	2.5x10 <sup>7</sup>
VIM	53.62	16	27	5.7x10 <sup>6</sup>	3x10 <sup>7</sup>	1x10 <sup>7</sup>
ANXA2	38.58	18	38	2.3x10 <sup>7</sup>	2x10 <sup>6</sup>	x10 <sup>6</sup>
ANXA5	35.91	11	14	7.9x10 <sup>6</sup>	7.7x10 <sup>5</sup>	6.5x10 <sup>6</sup>
GSTP1*	23.35	11	24	3.2x10 <sup>7</sup>	0	0

\* Asterisk denotes that no peptides were identified in extracts from MDCK cell cultures.