

Table S3. Quantified dynamics of punctuated F-actin contractions in Xdd1-expressing cells (means \pm s.d)

	Late mesoderm		Animal cap ectoderm	
	control	Xdd1	control	Xdd1
# of explants	7	5	3	6
# of cells	12	15	16	18
Cell shape (LTW)	4.13 \pm 1.72	1.44 \pm 0.24	1.31 \pm 0.24	1.44 \pm 0.31
Contractile area (%)	33 \pm 11	23 \pm 15	14 \pm 7	18 \pm 23
Rate of contractions (#/hr)	45.5	18.8	14.63	15
Life span (min) per Contraction	2.14 \pm 0.95	2 \pm 0.97	2.33 \pm 2.48	1.29 \pm 2.09
Distance (μm) per Contraction	10.51 \pm 4.4	8.77 \pm 4.45	0.5 \pm 0.25	0.35 \pm 0.44