Table S1. Timing of Ea/Ep division following CCC and SAX-7/L1CAM loss of function

Embryo	Average Minutes between MSa/MSp division and Ea/Ep division	Standard Deviation	n
wildtype	22.9	4.1	20
hmr-1(RNAi)	23.1	1.6	13
sax-7(eq1)	22.5	2.5	10
sax-7(eq1); hmr-1 (RNAi)	23.5	2.4	10

Table S2. Synergy between *hmr-1(RNAi)* and potential L1CAM linker proteins

Embryo condition + *hmr-1(RNAi)*	% with any Ea/Ep defect (n)	% Gastrulation cleft closure failure	% Rupture during ventral enclosure	% Hmr phenotype	% Hmp-like dorsal balloon	n	Homolog/function
wildtype	0 (20)	8	17	75	0	36	
unc-44(e362)	0 (20)	3	16	78	3	37	ankyrin / spectrin-actin cytoskeleton
sma-1(RNAi)	0 (33)	2	0	14	84	37	β_H spectrin / spectrin-actin cytoskeleton
unc-70(RNAi)	0 (26)	2	4	14	80	50	β_G-spectrin / spectrin-actin cytoskeleton
spc-1(RNAi)	0 (41)	2	20	61	16	61	α-spectrin / spectrin-actin cytoskeleton
erm-1(RNAi)	0 (39)	1	7	79	11	72	similar to ezrin, radixin, and moesin / membrane protein / cytoskeletal linker
igcm-1(RNAi)	0 (32)	0	15	42	42	45	Echinoid / predicted role in cell adhesion

Table S3. ABar spindle defects following CCC and SAX-7/L1CAM loss of function

Embryo	% Embryos with abnormal ABar division orientation	n
wildtype	0	22
hmr-1(RNAi)	39	23
sax-7(eq1)	0	19
sax-7(eq1); hmr-1(RNAi)	59	29
sax-7(RNAi); hmr-1(RNAi)	30	23
pry-1(RNAi); hmr-1(RNAi)	12	25
hmp-1(RNAi)	18	28
hmp-2(RNAi)	23	30
sax-7(eq1); hmp-1(RNAi)	65	23
sax-7(eq1); hmp-2(RNAi)	36	28
sax-7(eq1); jac-1(RNAi)	3	32