Figure S1. Examples of pressure effects on the morphology of *M. edulis* embryos incubated for 4 hours, with fertilization occurring at incubation pressure (light microscope images). (a) unfertilized egg (20°C, 300 atm); (b) fertilized egg showing abnormal development with an irregular cell membrane (20°C, 300 atm); (c) visible cleavage furrow of the two-cell stage (20°C, 400 atm); (d) unfertilized egg with cytoplasmic extrusions over the surface (10°C, 500 atm); (e) abnormally developing embryo (10°C, 500 atm); (f) abnormal cleavage furrow of the two-cell stage with cytoplasmic extrusions over the surface (10°C, 500 atm).

Figure S2. Examples of pressure effects on the morphology of *M. edulis* embryos incubated for 24 hours at 10°C, with fertilization occurring at incubation pressure (scanning electron micrographs, SEM). (a) uncleaved egg, with sperm cells (1) over its surface (200 atm); (b), cleavage furrow (2) of the two-cell stage (200 atm); (c) abnormal multi-celled embryo, with membrane breakage and cytoplasmic extrusions (3) over the surface (200 atm); (d) fertilized egg with rough surface and polar body (4) (300 atm); (e) two-cell stage embryo with rough surface and polar body (300 atm); (f) gastrula stage embryo with cilia, blastopore (5) and shell field invagination (6) (100 atm). Scale bars: 10 μm.