

Supplementary table 1 Larval and juvenile stages for *Branchiostoma belcheri*

Stage	easily identifiable morphological criteria
(larval)	
L1	knife-shaped body forming rostrum and caudal fin
L2	mouth opens, first pigment spot
L3	two primary gill slits open and the third is forming
L4	three gill slits open, anteriormost pigment spot
L5	fourth and fifth primary gill slits are forming, anteriormost pigment spot and third one in between the previous two, chevron-shaped endostyle, constriction of alimentary canal
L6	anal migration onto left side
L7	size reduction of anteriormost primary gill slit, coloring of alimentary canal
L8	definitive number of myomeres, integumental fold in preoral region, preoral cavity
(metamorphic)	
M1	secondary gill row appear, dorsal and ventral fin-ray chambers, posterior atrial chamber
M2	completion of atrial chamber formation, migration of primary gill row, bisection of secondary gill slits, future right preoral cirri
M3	pairing of primary and secondary gill slits, budding of hepatic diverticulum
M4	preoral cirri on both sides, larval mouth transforms into verum
(juvenile)	
J1	first synapticles in gills, 10 preoral cirri on either side
J2	second synapticles in gills, papillae of preoral cirri, intercirral membrane, glandular strips on atrial wall