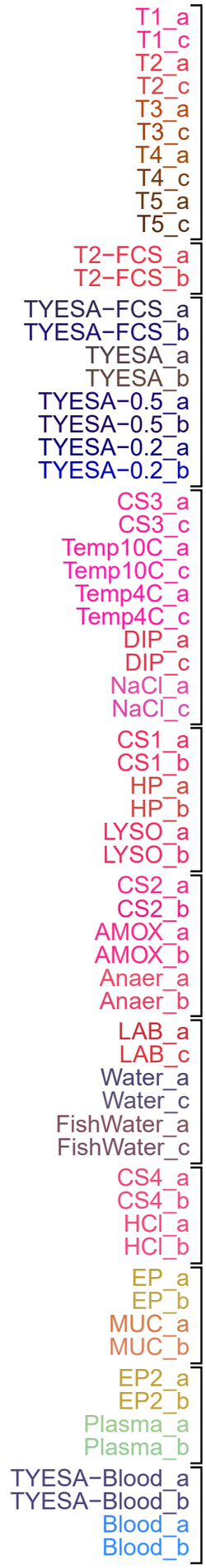

Expression during the growth cycle. Cells were grown in Tryptone Yeast Extract Salts (TYES) at 18°C with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio). Five samples were harvested in the course of growth: Starting cultures were diluted 500 times in fresh TYES and cells were harvested at OD600nm of 0.4 ([T1], exponential phase), 1 and 1.2 ([T2] and [T3], transition phase), 1.3 and 1.7 ([T4] and [T5], early and late stationary phase, resp.).

Expression in cells grown in TYES supplemented with 5% fœtal calf serum. Starting cultures performed in TYES were diluted 500 times in fresh TYES 5% FCS and cultures incubated at 18°C with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio). Cells were harvested at OD600nm of 1 [T2-FCS].

Expression in colonies on TYES-agar. Starting cultures were performed in TYES at 18°C 200 rpm. These cultures were then diluted in 1% peptone water at final concentration of 1E4 cfu/mL and cells plated onto TYES plates containing various nutrient concentrations. After incubation for 4 days at 18°C, cells were harvested from plates containing individual colonies. TYES-based agar (TYESA) plates contained standard nutrients concentration supplemented with 5% FCS [TYESA-FCS] and not supplemented [TYESA], or TYES nutrients diluted 2-times [TYESA-0.5] or 5-times [TYESA-0.2] without FCS supplementation.

Adaptation to various growth conditions. Starting cultures performed in TYES were diluted 500 times in a same batch of TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) in various conditions. For cold temperature adaptation, cultures were incubated at 18°C [CS3], 4°C [Temp4C] or 10°C [Temp10C]. For the growth at high salinity, the salinity of the medium was adjusted by adding NaCl before cells inoculation to produce a final concentration of 0.75% [NaCl]. Iron depletion was obtained by adding 2,2-dipyridyl in the medium at a final concentration of 25µM [DIP]. For [NaCl] and [DIP], growth was performed at 18°C. Cells were harvested at OD600nm of 0.4, corresponding to exponential phase for all conditions.

Adaptation to stress conditions. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) at 18°C until OD600nm of 0.8. Cultures were then splitted in three and hydrogen peroxide [HP] or lysozyme [LYSO] was added to one of them at a final concentration of 100 µM or 100 µg/mL, respectively. The third one was used as unstressed control [CS1]. Cells were harvested from the three cultures 10 min after addition.

Adaptation to stress conditions. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) at 18°C until OD600nm of 0.4. Cultures were then splitted in three. Control cultures were maintained in the same growth conditions [CS2]. For amoxicillin exposure, cultures were supplemented with amoxicillin at final concentration of 0.4 µg/mL [AMOX]. For oxygen limitation [Anaer], cultures were transfered in a 15-mL tube completely filled and maintained under orbital shaking at 18°C. Cells were harvested from the cultures after 1 h after of incubation.

Expression of cells in water. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) until OD600nm of 1. Cultures were then diluted 100-times in 15 L dechlorinated water maintained at 10°C with vigorous aeration in aquarium containing 10 juveniles rainbow trouts [FishWater] or no fish [Water]. Bacteria were harvested after 24 h of incubation by vacuum filtration of 1 L of water on TPP® Filtermax rapid bottle-top filter with 0.22 micron pore size. Cultures used for inoculation of aquarium water were harvested at OD600 of 1 using the same procedure of vacuum filtration.

Exposure to acid stress. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) at 18°C until OD600nm of 0.5. Cultures were then splitted in two halves and HCl 0.1N solution was diluted 133x in one of them [HCl] or not [CS4]. Cells were harvested from the cultures after 5 min of incubation.

Exposure to skin mucus of rainbow trout. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) at 18°C until OD600nm of 1. Cultures (8 mL) were harvested by centrifugation 3 min at 4000g, washed in sterile 1% peptone water, then resuspended in 400 µL of the same buffer. This bacterial suspension was splitted in two halves then mixed (v:v) with skin mucus recovered from juvenile rainbow trout [MUC] or 1% peptone water [EP]. Cells were harvested after 15 min of incubation under orbital shaking at 18°C.

Exposure to plasma of rainbow trout. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) at 18°C until OD600nm of 1. Cultures (8 mL) were harvested by centrifugation 3 min at 4000g, washed twice in sterile 1% peptone water and splitted in two halves. One of the pellets was resuspended in 300 µL of plasma [Plasma] and the other one in 300 µL of peptone water [EP2]. Plasma was prepared as following: whole blood was collected from 4 juvenile rainbow trout and pooled in a pre-cooled collection tube containing heparin. Cells were removed by centrifugation 5 min at 200g 4°C.

Colonies grown in the presence of blood. Starting cultures were diluted 500 times in TYES and incubated with vigorous shaking (200 rpm and 5:1 flask-to-volume ratio) at 18°C until OD600nm of 2. Twenty µL of culture were then striked on TYES-agar plates with an overlay of 10% defibrinated horse blood-agar [TYESA-Blood] or on plates made with 10% defibrinated horse blood solidified with 1.5% agar [Blood]. Plates were inubated at 18°C until colonies appeared and cells were then harvested, 4 and 10 days after inoculation for [TYESA-Blood] and [Blood], respectively.