

## **RNA extraction protocol**

- Total RNA was isolated from encephalon tissue using TRIzol Reagent (Invitrogen, Carlsbad, CA, USA) and PureLink RNA Mini Kit (Invitrogen).
- 60 mg tissue samples were homogenized in 1 ml of TRIzol Reagent using Precellys®24 homogenizer (Bertin Technologies, Montigny-le-Bretonneux, France) combined with 1.4 and 2.8 mm ceramic beads mix lysing tubes (Bertin Technologies).
- RNA isolation was performed following manufacturer instructions and RNA was suspended in RNase free water and stored at –80 °C.
- RNA quantity and purity were assessed with NanoDrop 1000 Spectrophotometer (Thermo Scientific Inc, Bremen, Germany).
- RNA integrity was assessed on an Agilent 2100 Bioanalyzer with Agilent RNA 6000 Nano chips (Agilent Technologies, Santa Clara, CA, USA), which estimates the 28S/18S (ribosomic RNAs) ratio and the RNA integrity number (RIN value).