

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Summary of single cell RNAseq samples. For each library is provided: single cell's name, stage, embryo number, gender, cross and the raw read number, filtered ones and percentage of mapping.

File Name: Supplementary Data 2

Description: Silencing gene classes Reactivation timing and allelic ratio for the 116 informative and well-expressed Xlinked genes in hybrid ICM cells (B6 x Cast cross).

File Name: Supplementary Data 3

Description: List of genes correlated or anti-correlated with X-linked gene reactivation between E3.5 and E4.0.