

Supplementary data 1: differential expression analysis of miRNAs in FACS-sorted β -cells from male mice (12 vs 3 months and 22 vs 3 months) and female mice (12 vs 3 months).

Supplementary data 2: differential expression analysis of isomiRs in FACS-sorted β -cells from male mice (12 vs 3 months and 22 vs 3 months).

Supplementary data 3: differential expression analysis of piRNAs in FACS-sorted β -cells from male mice (12 vs 3 months and 22 vs 3 months).

Supplementary data 4: differential expression analysis of tRFs in FACS-sorted β -cells from male mice (12 vs 3 months and 22 vs 3 months) and female mice (12 vs 3 months).

Supplementary data 5: differential expression analysis of other sequences annotating to single genomic regions in FACS-sorted β -cells from male mice (12 vs 3 months and 22 vs 3 months) and female mice (12 vs 3 months).

Supplementary data 6: literature metanalysis of age-regulated miRNAs associated to β -cell process and diabetes.

Supplementary data 7: results derived from RRHO. Lists of commonly regulated miRNAs in β -cells from male and female mice during aging.

Supplementary data 8: differential expression analysis of miRNAs in FACS-sorted β -cells from 8-month-old male mice (β Gal+ versus β Gal-).

Supplementary data 9: differential expression analysis of tRFs in FACS-sorted β -cells from 8-month-old male mice (β Gal+ versus β Gal-).

Supplementary data 10: differential expression analysis of miRNAs in FACS-sorted iMACs from male mice (12 vs 3 months and 22 vs 3 months) and female mice (12 vs 3 months).

Supplementary data 11: differential expression analysis of tRFs in FACS-sorted iMACs from male mice (12 vs 3 months and 22 vs 3 months) and female mice (12 vs 3 months).

Supplementary data 12: list of oligonucleotides used in the study.

Supplementary data 13: source data for figures including raw data used to produce data plots.