Identification of reference genes for studies of quantitative gene expression in male and female quail tissues.

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Abstract

This study aimed to evaluate stability and recommend reference genes for quantitative real-time PCR in different tissues from male and female broiler quails. The stability of 10 housekeeping genes (GAPDH, RPL5, MRPS27, MRPS30, TFRC, HMBS, EEF1, LDHA, B2M and UBC) was analyzed in heart, thigh muscle, brain and spleen, by means Bestkeeper, NormFinder, GeNorm softwares with ΔCq method. The most stable housekeeping genes were MRPS30, TFRC and HMBS in heart; MRPS30, EEF1 and HMBS in thigh muscle; B2M, GAPDH and UBC in brain; and EEF1, LDHA and HMBS in spleen. It is recommended to be used as reference genes for gene expression studies of male and female quails.

Full Text

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Figures

Figure 1

Expression variability of reference genes evaluated in thigh muscle from broiler quails, within and between male and female individuals.

Figure 2

Expression variability of reference genes evaluated in brain from broiler quails, within and between male and female individuals.

Figure 3

Expression variability of reference genes evaluated in heart from broiler quails, within and between male and female individuals.

Figure 4

Expression variability of reference genes evaluated in spleen from broiler quails, within and between male and female individuals.

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