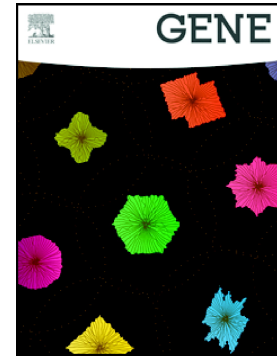


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Genome-wide Profiling of Gene Expression and DNA Methylation Provides Insight into Low-altitude Acclimation in Tibetan Pigs

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Abstract

Efforts have been made to characterize the high-altitude adaption in Tibetan pigs and identified vast of genes or genomic regions undergone natural selection. Nonetheless, information concerning gene expression and DNA methylation changes response to low-altitude acclimation in Tibetan pigs is long overdue. To explore the exceptional mechanisms of gene expression and DNA methylation that are induced by low altitude environments in Tibetan pigs, we performed a comparative transcriptomic and DNA methylation analysis of skeletal muscle between indigenous Tibetan pigs that reside in high altitude regions (~4,000 m) and their counterparts that migrated to the geographically

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