

Table 1. Muscle histological, gene expression, protein abundance, and DNA methylation analysis of the skeletal muscle of piglets from sows fed with (MET) or without (CON) a methylation blend supplemented diet. Mean values \pm standard error (SE).

Item	Treatments		<i>P</i> – value ¹
	CON	MET	
	<i>Muscle histology</i>		
Fiber number, 40X magnification	701 \pm 57.7	713 \pm 59.9	0.876
Fiber size, μ m	55.5 \pm 2.4	60.5 \pm 2.5	0.093
	<i>Gene expression</i> ²		
<i>MyoG</i>	7.67 \pm 0.25	7.88 \pm 0.26	0.497
<i>MyoD</i>	7.43 \pm 0.18	7.58 \pm 0.19	0.564
<i>MRF4</i>	8.11 \pm 0.14	8.39 \pm 0.15	0.115
<i>IGF1R</i>	7.14 \pm 0.20	7.14 \pm 0.20	0.988
<i>IGF2R</i>	7.04 \pm 0.13	7.23 \pm 0.14	0.180
<i>MSTN</i>	7.90 \pm 0.26	7.64 \pm 0.28	0.486
	<i>Protein abundance</i> ³		
PDGFR α	0.20 \pm 0.06	0.12 \pm 0.06	0.405
DLK1	0.47 \pm 0.13	0.22 \pm 0.14	0.185
PAX7	0.34 \pm 0.11	0.06 \pm 0.11	0.058
	<i>DNA methylation</i>		
5-methyl-2'-deoxycytidine	8.50 \pm 0.90	10.8 \pm 0.92	0.061

¹ Significances were declared at p -value \leq 0.05 and trends when $0.05 < p < 0.10$.

²RT-qPCR analysis was used to determine gene expression of the markers myogenin (*MyoG*), myogenic differentiation 1 (*MyoD*), muscle-specific regulatory factor 4 (*MRF4*), insulin like growth factor 1 receptor (*IGF1R*), insulin like growth factor 2 receptor (*IGF2R*), and myostatin (*MSTN*). Results are expressed relative to 18S gene (arbitrary units).

³Western Blotting analysis was used to determine protein abundance of the markers platelet derived growth factor receptor alpha (PDGFR α), protein delta homolog 1 (DLK1), and paired box 7 (PAX7). The housekeeping protein used to normalize the abundance of target protein was α -tubulin.