

**Table S3.** Classification showing the involvement of genes common for LIM and HER breeds in selected biological processes associated with muscle development (DAVID).

Process	Number of genes	Gene symbol	FDR
muscle contraction	38	<i>aldoa; myl6; edn3; myl4; tnnc2; tnnc1; tacr2; myl1; utr; pgam2; fkb1a; ttn; tpm1; des; dysf; myl6b; ltb4r; ckmt2; slmap; asph; chrna1; actc1; acta1; myh3; myh2; gal; homer1; tnnt2; tnnt1; myh11; smpx; chrnb2; chrnb1; kbtbd10; chrne; casq2; sgca; chrng</i>	3,29E-07
muscle system process	39	<i>aldoa; myl6; edn3; myl4; tnnc2; tnnc1; tacr2; myl1; utr; pgam2; fkb1a; ttn; tpm1; des; dysf; myl6b; ltb4r; ckmt2; slmap; asph; chrna1; actc1; acta1; myh3; myh2; igf1; gal; homer1; tnnt2; tnnt1; myh11; smpx; chrnb2; chrnb1; kbtbd10; chrne; casq2; sgca; chrng</i>	1,49E-06
muscle organ development	43	<i>myl6; myl4; myl2; tnnc1; erbb3; des; myl1; utr; eln; fkb1a; foxo4; ttn; tpm1; tagln3; tgfb2; hand1; myl6b; gata6; speg; tdgf1; myog; ppp3ca; chrna1; col11a1; unc45b; srpk3; actc1; acta1; smad7; myh3; nf1; myf5; hspg2; igf1; csrp2; homer1; tnnt2; itga7; myh11; foxc2; sgce; sgca; sgcb</i>	3,71E-05
striated muscle contraction	17	<i>aldoa; myl4; actc1; tnnc2; tnnc1; myh3; myh2; myl1; pgam2; ttn; homer1; tpm1; tnnt1; smpx; chrna1; kbtbd10; casq2</i>	2,36E-04
muscle tissue development	28	<i>myl6; myl2; erbb3; tnnc1; eln; utr; fkb1a; ttn; tpm1; tgfb2; hand1; gata6; myl6b; tdgf1; myog; ppp3ca; chrna1; col11a1; actc1; acta1; smad7; nf1; myf5; hspg2; homer1; tnnt2; myh11; foxc2</i>	1,11E-03
striated muscle tissue development	27	<i>myl6; myl2; erbb3; tnnc1; eln; utr; fkb1a; ttn; tpm1; tgfb2; hand1; gata6; myl6b; tdgf1; myog; ppp3ca; chrna1; col11a1; actc1; acta1; smad7; myf5; hspg2; homer1; tnnt2; myh11; foxc2</i>	1,41E-03
extracellular matrix organization	24	<i>elf3; lum; nf1; myf5; eln; col3a1; cst3; hspg2; ccdc80; fkb1a; spink5; aplp2; tgfb2; crispld2; col1a2; pdgfra; myh11; col12a1; foxc2; col1a1; lamc1; col11a1; smarca4; dpt</i>	4,87E-03
muscle tissue morphogenesis	11	<i>tnnt2; actc1; hand1; myl2; tnnc1; smad7; foxc2; fkb1a; ttn; col11a1; tpm1</i>	2,95E-02
cardiac muscle tissue morphogenesis	11	<i>tnnt2; actc1; hand1; myl2; tnnc1; smad7; foxc2; fkb1a; ttn; col11a1; tpm1</i>	2,95E-02

---

cardiac muscle tissue development	16	<i>actc1; myl2; smad7; tnnc1; hspg2; fklp1a; ttn;</i> <i>tpm1; tgf2; tnnt2; hand1; gata6; tdgf1;</i> <i>myh11; foxc2; col11a1</i>	2,96E-02
-----------------------------------	----	---	----------

---