

**ESM Table 3.** the expression of *Glut4* in skeletal muscle at the diabetic stage (protocol-1) and at the pre-diabetic stage (protocol-2).

	Diabetic stage (at 46 weeks of age) (fold changes)	Pre-diabetic stage (at 21 weeks of age) (fold changes)
LETO (n = 8)	1.00±0.40	1.00±0.3
LETO + RDX (n = 8)	1.01±0.27	1.03±0.25
OETF(n = 8)	0.62±0.11 <sup>††</sup>	0.70±0.18 <sup>†</sup>
OETF + RDX (n = 8)	0.95±0.04 <sup>††</sup>	0.91±0.09 <sup>†</sup>

Data are means±SEM. <sup>†</sup>*P* < 0.05, <sup>††</sup>*P* < 0.01 LETO vs. OETF; <sup>†</sup>*P* < 0.05, <sup>††</sup>*P* < 0.01 OETF vs. OETF + RDX. *Glut4*, glucose transporter 4.