



**Supplementary Figure1:**

Abbreviations: STZ: streptozotocin; F0: maternal generation; F1: offspring generation; E0.5: embryonic day 0.5; RPG: random plasma glucose; OGTT: oral glucose tolerance test

**Supplementary Table1. Primer sequences**

Genes	Species	Forward sequence	Reverse sequence
$\beta$ -Actin	Human	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG
<i>GLUT1</i>	Human	GGCCAAGAGTGTGCTAAAGAA	ACAGCGTTGATGCCAGACAG
<i>GLUT3</i>	Human	GGTTTGTTGGCTGAAAAAGCTG	CTCAGAGGGTGGGCATTTC
<i>GLUT4</i>	Human	AACTGGACGAGCAACTTCATCAT	CGTTCTCATCTGCCCTAAATCT
<i>GLUT8</i>	Human	GTCAACGCCGTATGTTCTATG	CCATGACCACACCTGACAAGAC
<i>GLUT9</i>	Human	ACTGCCATCTTATCTGCATTGG	CTCTTGGAAACGTC TGCTTAC
<i>GLUT12</i>	Human	CTATCAACCAGTCCTGGATGAGTCTGT	CTGTGACTATCTGGTATTCA GTGTGGCTTA
$\beta$ -actin	mouse	CCACTGCCGCATCCTCTTCC	CTCGTTGCCAATAGTGATGAC
<i>Slc2a1</i>	Mouse	TATTGCCAGGTGTTGG	ATTGATGAGCAGGAAGCG
<i>Slc2a3</i>	Mouse	GGAGAGAGGTGCTTCCTTG	GCCCACAACTGGGTCTT
<i>Slc2a4</i>	Mouse	GAGAGAGCGTCCAATGTCC	TGATGCCTGAGAGCTGTTG
<i>Slc2a8</i>	Mouse	CAAGGGTGTGGCTACCG	CACTGAGAGCGCAGAAGG
<i>Slc2a9</i>	Mouse	GACACCCGACATCACTCC	CACCCACTCAAACACCCCT
<i>Slc2a12</i>	Mouse	CAGTCGTCCCAGCTGCTTACAA	ATGGCGCGGCCTCTAATTG