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- Analysis of the TMP treatment effect on the expression of Figure 5.16 the Akt signalling pathway proteins in the kidney tissue of STZ-NCT-induced diabetic rats through western blotting (A); (B) relative expression of p-Akt, (C) relative expression of p-GSK-3 β , (D) relative expression of Bcl-2, (E) relative expression of Bax, (F) relative expression of cleaved caspase-3. Experiments were independently repeated 3 times. The shown blots were the result of one of the investigation. Intensities of the band in each blot were evaluated after normalisation by the corresponding total protein, and the values are presented as mean \pm S.E.M., where n = 3 independent experiments. Differences were evaluated by one-way ANOVA followed by Tukey's multiple comparison post hoc tests, and the significance level was set at P < 0.05; where * denotes statistical significance compared to NC, and # denotes statistical significance compared to DC. NC, normal control; DC, diabetic control; D, diabetic; T-1, TMP (100mg/kg); T-2, TMP (150mg/kg); T-3, TMP (200mg/kg); TMP, tetramethylpyrazine.
- Figure 6.1 Illustration of the mechanism of action of TMP in of HFD-STZ-induced amelioration T₂D in rats. Abbreviations: TMP, tetramethylpyrazine; PI3K, phosphatidylinositol-3-kinase; Akt, protein kinase B; GLUT-4, glucose transporter-4; HFD, high-fat diet; STZ, streptozotocin; T2D, type-2 diabetes; SM, skeletal muscle; H, heart; AT, adipose tissue; \uparrow , increase; \downarrow , decrease; +, activation; -, inhibition.
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