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A protective role of Gαq-RGS2 loop activator on streptozotocin induced diabetic complications in rats: An independent on elevated serum glucose level modulation

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Abstract:

An overactivation of Gαq dependent signaling pathway is crucial for development of metabolic and vascular abnormalities in diabetes. Therefore, our objective was to study effects of Gαq-RGS2 loop activator (1-(5-chloro-2-hydroxyphenyl)-3-(4-(trifluoromethyl)phenyl)-1H-1,2,4-triazol-5(4H)-one) on STZ induced diabetic complications in rats. Animals were divided into four groups; normal rats, diabetic rats (Streptozotocin, STZ, 60 mg/kg, *i.p.*), Gαq-RGS2 loop activator (1mg/kg/d, *i.p.*, 15 d, at 6 wk after citrate buffer or STZ administration, respectively) treated normal rats and diabetic rats. At the end of 8 wk, the metabolic parameters, hemodynamic parameters, *in-vivo* vascular reactivity and aortic anti-oxidant status were evaluated. A treatment of Gαq-RGS2 loop activator

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