Product Name	:	Anagliptin
Synonyms	:	SK-0403
Cat No.	:	M22005
CAS Number	:	739366-20-2
Molecular Formula	:	C19H25N7O2
Formula Weight	:	383.45
Chemical Name	:	——
Description	:	Anagliptin is a potent Inhibitor of DPP-4(IC50 of 3.8 nM), for the treatment of type 2 diabetes mellitus.Soluble DPP-4 augmented cultured SMC proliferation, and anagliptin suppressed the proliferation by inhibiting ERK phosphorylation.?In THP-1 cells, anagliptin reduced lipopolysaccharide-induced TNF-α production with inhibiting ERK phosphorylation and nuclear translocation of nuclear factor-κB.?Quantitative analysis also showed that anagliptin reduced the area of atherosclerotic lesion in apoE-deficient mice.Treatment with anagliptin for 16 wk significantly reduced accumulation of monocytes and macrophages in the vascular wall, SMC content in plaque areas, and oil red O-stained area around the aortic valve without affecting glucose tolerance or body weight.?Serum DPP-4 concentrations were significantly higher in apoE-deficient mice than control mice, and the levels increased with aging, suggesting the involvement of DPP-4 in the progression of atherosclerosis[1]. Anagliptin treatment significantly decreased the plasma total cholesterol (14% reduction, $P < 0.01$) and triglyceride levels (27% reduction, $P < 0.01$). Both low-density lipoprotein cholesterol and very low-density lipoprotein cholesterol were also decreased significantly by anagliptin treatment. Sterol regulatory element-binding protein-2 messenger ribonucleic acid expression level was significantly decreased at night in anagliptin-treated mice (15% reduction, $P < 0.05$). Anagliptin significantly suppressed sterol regulatory element-binding protein activity in HepG2 cells (21% decrease, $P < 0.001$).
Pathway	:	Metabolic Enzyme/Protease
Target	:	DPP
Receptor	:	DPP-4;DPP-8;DPP-9;
Solubility	:	DMSO:95mg/ml (247.75 Mm; Need ultrasonic)
SMILES	:	CC1=NN2C=C(C=NC2=C1)C(=O)NCC(C)(C)NCC(=O)N1CCC[C@H]1C#N
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	

1. Ervinna N, et al. Anagliptin, a DPP-4 inhibitor, suppresses proliferation of vascular smooth muscles and monocyte inflammatory reaction and attenuates atherosclerosis in male apo E-deficient mice. Endocrinology. 2013 Mar;154(3):1260-70.