
Product Data Sheet

Product Name: Mirodenafil

Cat. No.: GC36616

Chemical Properties

Cas. No. 862189-95-5

SMILES O=C1C(N(CC)C=C2CCC)=C2N=C(C3=CC(S(=O)(=O)N4CCN(CCO)CC4)=O)=CC=C3OCCC)N1

Formula C₂₆H₃₇N₅O₅S

M.Wt 531.67

Solubility DMSO : 125 mg/mL (235.11 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Mirodenafil is a phosphodiesterase 5 (PDE5) inhibitor.¹ It increases penile intracavernosal pressure (ICP) in a rat model of diabetes induced by streptozotocin and in a rat model of cavernosal nerve injury when administered at doses of 1 and 10 mg/kg, respectively.^{1,2} Mirodenafil (4 mg/kg per day) decreases bladder wall submucosal fibrosis and degeneration in a rat model of chronic bladder ischemia.³ It also decreases bladder overactivity in a female rat model of partial bladder outlet obstruction.⁴

1.Park, K., Cho, S.Y., and Kim, S.W.Erectile response to type 5 phosphodiesterase inhibitor could be preserved with the addition of simvastatin to conventional insulin treatment in rat model of diabetes *Int. J. Androl.* 34(5 Pt 2)e468-e474(2011) 2.Kim, H., Sohn, D.W., Kim, S.D., et al.The effect of mirodenafil on the penile erection and corpus cavernosum in the rat model of cavernosal nerve injury *Int. J. Impot. Res.* 22(5)291-297(2010) 3.Choi, H., Bae, J.H., Shim, J.S., et al.Mirodenafil prevents bladder dysfunction induced by chronic bladder ischemia in rats *Int. Neurourol. J.* 19(1)19-26(2015) 4.Kang, J.Y., Kim, E.K., and Kim, K.M.Effects of mirodenafil, a phosphodiesterase-5 inhibitor, on

Caution: Product has not been fully validated for medical applications. For research use only.

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female rat bladder in a partial bladder outlet obstruction model: Physiological and immunohistochemical aspects Korean J. Urol.54(5)339-344(2013)

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