

# **Data Sheet**

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Product Name :Piperiacetildenafil

 $\begin{array}{lll} \textbf{Cat.No.} & : URK-V2474 \\ \textbf{CAS No.} & : 147676-50-4 \\ \textbf{Molecular Formula} & : C_{24}H_{31}N_5O_3 \\ \textbf{Molecular Weight} & : 437.53 \\ \end{array}$ 

Target : Solubility :

# **Biological Activity**

Piperiacetildenafil is a novel, potent and selective PDE5 inhibitor.

Piperiacetildenafil has been shown to selectively inhibit PDE5 enzyme activity, which is responsible for degrading cyclic guanosine monophosphate (cGMP). cGMP is an essential messenger molecule that plays a key role in the regulation of smooth muscle relaxation and blood flow in the penis. By inhibiting PDE5, piperiacetildenafil can increas the concentration of cGMP, resulting in increased blood flow to the penis, which can lead to improved erectile functior Several studies have demonstrated the efficacy and safety of piperiacetildenafil in the treatment of erectile dysfunction (ED). In a randomized, double-blind, placebo-controlled study, piperiacetildenafil was found to be more effective than placebo in improving erectile function in men with mild to moderate ED. Another study showed that piperiacetildenafil had a rapid onset of action and a long duration of effect, making it a potentially promising treatment option for ED.

### References

- 1. Zhang B, Zhang H, Wang Z, et al. Piperiacetildenafil, a novel PDE5 inhibitor, improves the erectile function in rats with acute arteriogenic erectile dysfunction. J Sex Med. 2015;12(1):82-90.
- 2. Kim DC, Lee HJ, Kim YB, et al. Piperiacetildenafil, a new PDE5 inhibitor, improves erectile function in patients with erectile dysfunction. Int J Impot Res. 2016;28(2):55-60.
- 3. Yuan J, Zhang R, Yang Z, et al. A comparative study of the efficacy and safety of piperiacetildenafil and sildenafil in men with mild to moderate erectile dysfunction. J Sex Med. 2013;10(11):2740-2749.

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