# PRODUCT INFORMATION



# **CMPD101**

Item No. 26808

CAS Registry No.: 865608-11-3

Formal Name: 3-[[[4-methyl-5-(4-pyridinyl)-4H-

1,2,4-triazol-3-yl]methyl]amino]-N-[[2-

(trifluoromethyl)phenyl]methyl]-benzamide

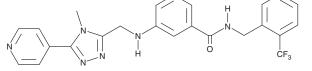
MF:  $C_{24}H_{21}F_3N_6O$ 

466.5 FW: **Purity:** ≥98%

 $\lambda_{max}$ : 224, 247, 320 nm UV/Vis.: Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



#### **Laboratory Procedures**

CMPD101 is supplied as a crystalline solid. A stock solution may be made by dissolving the CMPD101 in the solvent of choice, which should be purged with an inert gas. CMPD101 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CMPD101 in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

#### Description

CMPD101 is an inhibitor of G protein-coupled receptor kinase 2 (GRK2) and GRK3 (IC<sub>50</sub>s = 18 and 5.4 nM, respectively). It is selective for GRK2 and GRK3 over GRK1, GRK5, GRK6, and GRK7 (IC<sub>50</sub>s = 3,100, 2,300, >30,000, and 25,000 nM, respectively), as well as Rho-associated kinase 2 (ROCK2) and PKC $\alpha$  (IC<sub>50</sub>s = 1,400 and 8,100 nM, respectively). CMPD101 induces cAMP accumulation in HEK293 cells expressing human  $\beta_2$ -adrenergic receptors (EC $_{50}$  = 10  $\mu$ M). In isolated human prostate strips, CMPD101 (50 µM) inhibits contractions induced by electrical field stimulation, norepinephrine, phenylephrine, endothelin-1 (Item No. 24127), and U-46619 (Item No. 16450).<sup>2</sup>

## References

- 1. Okawa, T., Aramaki, Y., Yamamoto, M., et al. Design, synthesis, and evaluation of the highly selective and potent G-protein-coupled receptor kinase 2 (GRK2) inhibitor for the potential treatment of heart failure. J. Med. Chem. 60(16), 6942-6990 (2017).
- 2. Yu, Q., Gratzke, C., Wang, Y., et al. Inhibition of prostatic smooth muscle contraction by the inhibitor of G protein-coupled receptor kinase 2/3, CMPD101. Eur. J. Pharmacol. 831, 9-19 (2018).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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