## **Product** Data Sheet

## BUR1

Cat. No.: HY-121025 CAS No.: 23000-46-6 Molecular Formula:  $C_{16}H_{17}N_5$  Molecular Weight: 279.34

Target:TGF-β ReceptorPathway:TGF-beta/Smad

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	BUR1 is a BMP upregulator (EC $_{50}$ : 98 nM) and activates BMPRII signalling. BUR1 induces BMP2 and PTGS2 expression. BUR1 reversed pulmonary arterial pressure in Monocrotaline (HY-N0750) induced rats <sup>[1]</sup> .
In Vitro	BUR1 (0.2 µM, 15 min-24 h) increases expression of Inhibitor of DNA binding 1 (Id1) and phosphorylation of Smad1/5 in PAECs <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	BUR1 (4.5 mg/day, i.g., 3 weeks) reverses MCT-induced pulmonary arterial pressure and right ventricular systolic pressure in rats <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Xing Y, et al. A novel piperidine identified by stem cell-based screening attenuates pulmonary arterial hypertension by regulating BMP2 and PTGS2 levels. Eur Respir J. 2018 Apr 4;51(4):1702229.

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

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