Catalog \# 10-4294
XMU-MP-1
CAS\# 2061980-01-4
4-[(6,10-Dihydro-5,10-dimethyl-6-oxo-5H-pyrimido[5,4-b]thieno[3,2-e]diazepin-2-yl)amino]benzenesulfonamide Lot \# FBS4011


XMU-MP-1 is a potent, reversible, and selective inhibitor of the HIPPO pathway kinases MST1 and MST2 (IC50S = 71 nM and 38 nM respectively). ${ }^{1}$ It promoted liver repair/regeneration in mice and attenuated acetaminophen-induced liver injury. In a subarachnoid hemorrhage mouse model, XMU-MP-1 alleviated neurological deficits, brain edema, neuroinflammation, and white matter injury. ${ }^{2}$ XMU-MP-1 was also cardioprotective in mice with transverse aortic constriction ${ }^{3}$ and against ischemia/reperfusion injury ${ }^{4}$.

1) Fan et al. (2016), Pharmacological targeting of kinases MST1 and MST2 augments tissue repair and regeneration; Sci. Transl. Med. 8 352ra108
2) Qu et al. (2018); MST1 Suppression Reduces Early Brain Injury by Inhibiting the NF-kB/MMP-9 Pathway after Subarachnoid Hemorrhage in Mice, Behav. Neurol., 20186470957
3) Triastuti et al. (2019), Pharmacological inhibition of Hippo pathway, with the novel kinase inhibitor XMU-MP-1, protects the heart against adverse effects during pressure overload; Br. J. Pharmacol. 1763956
4) Liu et al. (2022), XMU-MP-1 protects heart from ischemia/reperfusion injury in mice through modulating Mst1/AMPK pathway; Eur. J. Pharmacol. 919174801

## PHYSICAL DATA

Molecular Weight: $\quad 416.47$
Molecular Formula: $\quad \mathrm{C}_{17} \mathrm{H}_{16} \mathrm{~N}_{6} \mathrm{O}_{3} \mathrm{~S}_{2}$
Purity: $\quad>98 \%$ by HPLC
NMR: (Conforms)
Solubility: $\quad$ DMSO ( $15 \mathrm{mg} / \mathrm{ml}$ )
Physical Description: Yellow solid
Storage and Stability: Store as supplied at $-20^{\circ} \mathrm{C}$ for up to 2 years from the date of purchase. Solutions in DMSO may be stored at $-20^{\circ} \mathrm{C}$ for up to 3 months.

## Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

