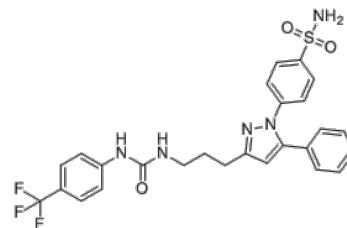


<b>Product Name</b>	: PTUPB
<b>Cat. No.</b>	: PC-62501
<b>CAS No.</b>	: 1287761-01-6
<b>Molecular Formula</b>	: C <sub>26</sub> H <sub>24</sub> F <sub>3</sub> N <sub>5</sub> O <sub>3</sub> S
<b>Molecular Weight</b>	: 543.565
<b>Target</b>	: Cyclooxygenase (COX)
<b>Solubility</b>	: 10 mM in DMSO



## Biological Activity

PTUPB is a novel dual acting **COX-2/sEH** inhibitor with IC<sub>50</sub> of 1.26 μM/0.9 nM, also is a potent **AKR1C3** inhibitor with IC<sub>50</sub> of 65 nM.

PTUPB does not inhibit COX-1 (IC<sub>50</sub>>100 μM).

PTUPB reduces kidney injury parameters, decreases inflammatory and oxidative stress markers in ZDF rats.

PTUPB exhibits more effective than the same dose of either COX-2 inhibitor (celecoxib) or sEH inhibitor (t-AUCB) alone, shows in vivo anti-allodynic activity in vivo.

PTUPB also suppresses glioblastoma growth by targeting EGFR and hyaluronan mediated motility receptor, potentiates the antitumor efficacy of cisplatin.

PTUPB inhibits CRPC proliferation by suppressing the AKR1C3/AR/AR-V7 axis and is more effective and superior to indomethacin.

PTUPB shows much better efficacy than indomethacin in castration-relapsed VCaP xenograft, patient-derived xenograft (PDX) organoid, and cell models generated from advanced prostate cancer patients.

## References

Joy C Yang, et al. *Oncogene*. 2023 Feb;42(9):693-707.

Li J, et al. *Oncotarget*. 2017 Sep 15;8(50):87353-87363.

Wang F, et al. *Mol Cancer Ther*. 2018 Feb;17(2):474-483.

Hwang SH, et al. *J Med Chem*. 2011 Apr 28;54(8):3037-50.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com