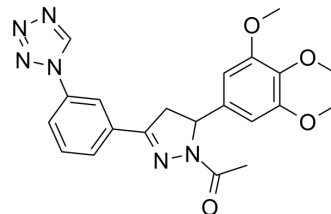


## COX-2-IN-21

Cat. No.:	HY-147815
CAS No.:	2519631-11-7
Molecular Formula:	C <sub>21</sub> H <sub>22</sub> N <sub>6</sub> O <sub>4</sub>
Molecular Weight:	422.44
Target:	COX
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	COX-2-IN-21 (Compound 5c) is a selective and orally active COX-2 inhibitor with an IC <sub>50</sub> of 0.039 μM. COX-2-IN-21 shows promising anti-inflammatory potential <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	COX-2 0.039 μM (IC <sub>50</sub> )	COX-1 12.4 μM (IC <sub>50</sub> )
<b>In Vitro</b>	COX-2-IN-21 (Compound 5c) (50 mg/kg) shows better anti-inflammatory activity and is less ulcerogenic than Celecoxib <sup>[1]</sup> . COX-2-IN-21 (50 mg/kg) displays potent inhibitory effect on the production of PGE <sub>2</sub> greater than Celecoxib, decreases rat serum concentrations of both TNF-α (% inhibition = 55.349) and IL-6 (% inhibition = 61.561) in a comparable or better activity to Celecoxib <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Labib MB, et al. Novel tetrazole-based selective COX-2 inhibitors: Design, synthesis, anti-inflammatory activity, evaluation of PGE<sub>2</sub>, TNF-α, IL-6 and histopathological study. Bioorg Chem. 2020 Nov;104:104308.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA