# **Product data sheet**



MedKoo Cat#: 565228		0	
Name: ONO-8711		Ŭ	
CAS: 216158-34-8		OH	
Chemical Formula: C <sub>22</sub> H <sub>30</sub> ClNO <sub>4</sub> S		$\Diamond$	
Exact Mass: 439.1584		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Molecular Weight: 439.995		HN.	
Product supplied as:	Powder	0=S=O	
Purity (by HPLC):	≥ 98%		
Shipping conditions	Ambient temperature		
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.		
	In solvent: -80°C 3 months; -20°C 2 weeks.	CI	

#### 1. Product description:

ONO-8711 is a selective EP1 antagonist.

#### 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.27 mL	11.36 mL	22.73 mL
5 mM	0.45 mL	2.27 mL	4.55 mL
10 mM	0.23 mL	1.14 mL	2.27 mL
50 mM	0.05 mL	0.23 mL	0.45 mL

#### 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

### 6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- 1. Yang H, Wang M, Sun H, Zhu S, Jin J. Synergetic Effect of EP1 Receptor Antagonist and (-)-Epigallocatechin-3-gallate in Hepatocellular Carcinoma. Pharmacology. 2019;104(5-6):267-275. doi: 10.1159/000502076. Epub 2019 Aug 21. PMID: 31434088.
- 2. Taub M, Parker R, Mathivanan P, Ariff MA, Rudra T. Antagonism of the prostaglandin E2 EP1 receptor in MDCK cells increases growth through activation of Akt and the epidermal growth factor receptor. Am J Physiol Renal Physiol. 2014 Sep 1;307(5):F539-50. doi: 10.1152/ajprenal.00510.2013. Epub 2014 Jul 9. PMID: 25007872; PMCID: PMC4154115.

#### In vivo study

- 1. Wada N, Matsumoto S, Kita M, Watanabe M, Hashizume K, Kakizaki H. Effect of intrathecal administration of E-series prostaglandin 1 receptor antagonist in a cyclophosphamide-induced cystitis rat model. Int J Urol. 2013 Feb;20(2):235-40. doi: 10.1111/j.1442-2042.2012.03126.x. Epub 2012 Aug 26. PMID: 22925406.
- 2. Takeuchi K, Aihara E, Sasaki Y, Nomura Y, Ise F. Involvement of cyclooxygenase-1, prostaglandin E2 and EP1 receptors in acid-induced HCO3- secretion in stomach. J Physiol Pharmacol. 2006 Dec;57(4):661-76. PMID: 17229989.

#### 7. Bioactivity

Biological target:

ONO-8711 is a selective EP1 antagonist.

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#### In vitro activity

This study investigated the synergetic effects of EP1-selective antagonist ONO-8711 and EGCG treatment on HCC to better understand the potential strategy to treat HCC. This study found that EGCG significantly inhibited PGE2 and EP1-selective agonist induced migration of HCC cells and increased the ratio of Bax/Bcl-2 even in the presence of ONO-DI-004 or PGE2. ONO-8711 significantly inhibited PGE2-induced HCC proliferation while increased the inhibitory effect of EGCG on HCC cell viability and migration ability compared with EGCG alone.

Reference: Pharmacology. 2019;104(5-6):267-275. https://pubmed.ncbi.nlm.nih.gov/31434088/

#### In vivo activity

Intrathecal administration of E-series prostaglandin 1 antagonist (ONO-8711; 0.5, 5 and 50  $\mu$ g) in sham controls and rats with cystitis induced by a single intraperitoneal injection of cyclophosphamide (300 mg/kg) was assessed by evaluating micturition pressure and intercontraction interval using a conscious-filling cystometry at 48 h after cyclophosphamide or saline injection. Rats with cyclophosphamide-induced cystitis showed a shorter intercontraction interval compared with controls, where the cumulative intrathecal administration of ONO-8711 did not significantly change micturition pressure or intercontraction interval compared with the baseline. In rats with cyclophosphamide-induced cystitis, each dose of ONO-8711 significantly increased the intercontraction interval compared with the baseline (46% increase at 50  $\mu$ g intrathecally).

Reference: Int J Urol. 2013 Feb;20(2):235-40. https://pubmed.ncbi.nlm.nih.gov/22925406/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.