

# PRODUCT INFORMATION

## ONO-8130

Item No. 19118



CAS Registry No.: 459841-96-4

Formal Name: 4-[[[2,3-dihydro-6-[(2-methylpropyl) [(4-methyl-2-thiazolyl)sulfonyl] amino]-1H-inden-5-yl]oxy)methyl]-benzoic acid

MF:  $C_{25}H_{28}N_2O_5S_2$

FW: 500.6

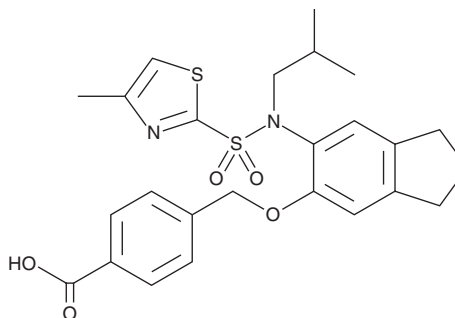
Purity:  $\geq 98\%$

UV/Vis.:  $\lambda_{max}$ : 232, 280 nm

Supplied as: A crystalline solid

Storage:  $-20^\circ\text{C}$

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



### Laboratory Procedures

ONO-8130 is supplied as a crystalline solid. A stock solution may be made by dissolving the ONO-8130 in the solvent of choice. ONO-8130 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of ONO-8130 in these solvents is approximately 2, 3, and 1 mg/ml, respectively.

ONO-8130 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ONO-8130 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ONO-8130 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

ONO-8130 is an orally bioavailable antagonist of the prostaglandin  $E_2$  ( $PGE_2$ ) receptor  $EP_1$  ( $K_i = 1.9 \text{ nM}$ ).<sup>1,2</sup> It exerts a more than 1,000-fold selectivity for  $EP_1$  compared with other EP receptors.<sup>2</sup> ONO-8130 suppresses pain associated with cyclophosphamide-induced cystitis in mice at 0.3-30 mg/kg.<sup>1</sup> It also blocks  $PGE_2$ -induced contraction and eliminates spontaneous tone of guinea pig trachea tested in tissue organ baths.<sup>2</sup>

### References

1. Miki, T., Matsunami, M., Nakamura, S., et al. ONO-8130, a selective prostanoid  $EP_1$  receptor antagonist, relieves bladder pain in mice with cyclophosphamide-induced cystitis. *Pain* **152**(6), 1373-1381 (2011).
2. S  fholm, J., Dahl  n, S.E., Delin, I., et al.  $PGE_2$  maintains the tone of the guinea pig trachea through a balance between activation of contractile  $EP_1$  receptors and relaxant  $EP_2$  receptors. *Br. J. Pharmacol.* **168**, 794-806 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 - USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM