

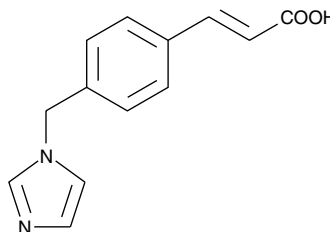
Product Information



Ozagrel

Item No. 70515

CAS Registry No.: 82571-53-7
Formal Name: 3-[4-(1H-imidazol-1-ylmethyl)phenyl]-2E-propenic acid
Synonym: OKY-046
MF: C₁₃H₁₂N₂O₂
FW: 228.3
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 275 nm



Laboratory Procedures

For long term storage, we suggest that ozagrel be stored as supplied at -20°C. It should be stable for at least one year.

Ozagrel is supplied as a crystalline solid. A stock solution may be made by dissolving the ozagrel in an organic solvent purged with an inert gas. Ozagrel is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ozagrel in these solvents is approximately 1 mg/ml.

Ozagrel is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ozagrel should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ozagrel has a solubility of approximately 1 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.

Inhibition of thromboxane synthase (TXAS), especially in human platelets, has been a clinical objective for many years. 1-Alkyl (N-alkyl)-imidazole derivatives have been recognized as TXAS inhibitors since the early 1980s.¹⁻³ Ozagrel is a 1-alkyl imidazole derivative that acts as a selective inhibitor of TXAS with an IC₅₀ of 11 nM. The beneficial effects of TXAS inhibition by ozagrel include improved motor coordination after experimental stroke⁴ and antihypertensive effects in spontaneously hypertensive rats.⁵

References

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2. Wright, W.B., Tomcufcik, A.S., Chan, P.S., *et al.* Thromboxane synthase inhibitors and antihypertensive agents. 4, N-[(1H-imidazol-1-yl)alkyl] derivatives of quinazoline-2,4(1H,3H)-diones, quinazolin-4(3H)-ones, and 1,2,3-benzotriazin-4(3H)-ones. *J. Med. Chem.* **30**, 2277-2283 (1987).
3. Wright, W.B., Jr., Press, J.B., Chan, P.S., *et al.* Thromboxane synthetase inhibitors and antihypertensive agents. 1. N-[(1H-imidazol-1-yl)alkyl]aryl amides and N-[(1H-imidazol-1,2,4-triazol-1-yl)alkyl]aryl amides. *J. Med. Chem.* **29**, 523-530 (1986).
4. Ichikawa, K., Tazawa, S., Hamano, S., *et al.* Effect of ozagrel on locomotor and motor coordination after transient cerebral ischemia in experimental animal models. *Pharmacology* **59**, 257-265 (1999).
5. Press, J.B., Wright, W.B., Jr., Chan, P.S., *et al.* Thromboxane synthetase inhibitors and antihypertensive agents. 2. N-[(1H-imidazol-1-yl)alkyl]-1H-isoindole-1,3(2H)-diones and N-[(1H-1,2,4-triazol-1-yl)alkyl]-1H-isoindole-1,3(2H)-diones as unique antihypertensive agents. *J. Med. Chem.* **29**(5), 816-819 (1986).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/70515

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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