

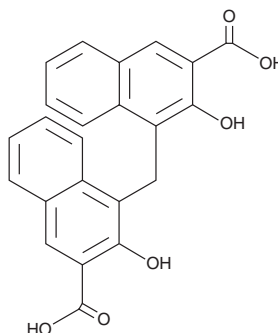
PRODUCT INFORMATION



Pamoic Acid

Item No. 13946

CAS Registry No.: 130-85-8
Formal Name: 4,4'-methylenebis[3-hydroxy-2-naphthalenecarboxylic acid]
Synonyms: Embonic Acid, NSC 30188, NSC 40132
MF: C₂₃H₁₆O₆
FW: 388.4
Purity: ≥98%
UV/Vis.: λ_{max}: 237, 370 nm
Supplied as: A crystalline solid
Storage: 4°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Pamoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the pamoic acid in the solvent of choice. Pamoic acid is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 0.2 mg/ml. Pamoic acid is also slightly soluble in methanol.

Description

Pamoic acid is a potent agonist of GPR35 orphan receptors (EC₅₀ = 79 nM in a β-arrestin recruitment assay).¹ It induces GPR35 translocation from the plasma membrane to the cytoplasm with an EC₅₀ value of 22 nM. Pamoic acid also increases ERK1/2 phosphorylation in a concentration-dependent manner in U2OS cells expressing human GPR35a. *In vivo*, pamoic acid has antinociceptive effects with an ED₅₀ value of 40.5 mg/kg in a mouse abdominal constriction model of visceral pain perception. Pamoate salts, of which pamoic acid is the main constituent, have been used in drug formulations to extend the duration of action.²

References

1. Zhao, P., Sharir, H., Kapur, A., *et al.* Targeting of the orphan receptor GPR35 by pamoic acid: A potent activator of extracellular signal-regulated kinase and β-arrestin2 with antinociceptive activity. *Mol. Pharmacol.* **78**(4), 560-568 (2010).
2. Neubig, R.R. Mind your salts: When the inactive constituent isn't. *Mol. Pharmacol.* **78**(4), 558-559 (2010).

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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