

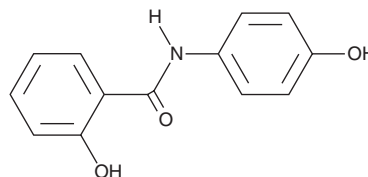
PRODUCT INFORMATION



Osalmid

Item No. 38513

CAS Registry No.: 526-18-1
Formal Name: 2-hydroxy-N-(4-hydroxyphenyl)-benzamide
Synonyms: NSC 93960, Oxaphenamide
MF: C₁₃H₁₁NO₃
FW: 229.2
Purity: ≥95%
UV/Vis.: λ_{max}: 301 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Osalmid is supplied as a solid. A stock solution may be made by dissolving the osalmid in the solvent of choice, which should be purged with an inert gas. Osalmid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of osalmid in these solvents is approximately 30 mg/ml.

Description

Osalmid is an inhibitor of ribonucleoside-diphosphate reductase subunit M2 (RRM2; IC₅₀ = 8.2 μM).¹ It decreases hepatitis B virus (HBV) DNA replication in infected HepG2 2.2.15 cells (EC₅₀ = 45.8 μM) and reduces HBV DNA levels in the supernatant and lysates of infected HepG2 2.2.15 cells (EC₅₀s = 11.1 and 16.5 μM, respectively). Osalmid inhibits the replication of HBV resistant to the nucleoside reverse transcriptase inhibitor 3TC (lamivudine; Item No. 18514) in infected HepG2 cells (EC₅₀ = 19.8 μM). It reduces the proliferation of HepG2, Huh7, and HCCLM3 cells in a concentration-dependent manner and decreases the proliferation of a variety of esophageal squamous cell carcinoma cells (IC₅₀s = 144.8-182.3 μM).^{2,3} Osalmid (400 mg/kg per day) reduces HBV DNA levels in serum and liver tissues in a transgenic mouse model of HBV infection. Intragastric administration of osalmid (200 mg/kg per day), in combination with radiation, reduces tumor growth in radiation-sensitive and -resistant KYSE-150 esophageal squamous cell carcinoma mouse xenograft models.³

References

1. Liu, X., Xu, Z., Hou, C., *et al.* Inhibition of hepatitis B virus replication by targeting ribonucleotide reductase M2 protein. *Biochem. Pharmacol.* **103**, 118-128 (2016).
2. Wu, Z., Zhan, Y., Wang, L., *et al.* Identification of osalmid metabolic profile and active metabolites with anti-tumor activity in human hepatocellular carcinoma cells. *Biomed. Pharmacother.* **130**, 110556 (2020).
3. Tang, Q., Wu, L., Xu, M., *et al.* Osalmid, a novel identified RRM2 inhibitor, enhances radiosensitivity of esophageal cancer. *Int. J. Radiat. Oncol. Biol. Phys.* **108(5)**, 1368-1379 (2020).

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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