

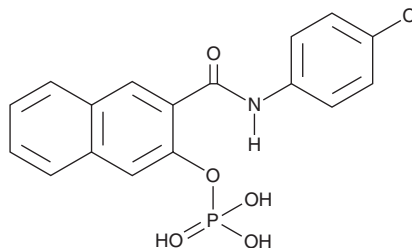
PRODUCT INFORMATION



Naphthol AS-E Phosphate

Item No. 33602

CAS Registry No.: 18228-17-6
Formal Name: N-(4-chlorophenyl)-3-(phosphonoxy)-2-naphthalenecarboxamide
Synonym: KG-501
MF: C₁₇H₁₃ClNO₅P
FW: 377.7
Purity: ≥98%
UV/Vis.: λ_{max}: 232, 273 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Naphthol AS-E phosphate is supplied as a crystalline solid. A stock solution may be made by dissolving the naphthol AS-E phosphate in the solvent of choice, which should be purged with an inert gas. Naphthol AS-E phosphate is soluble in DMSO.

Description

Naphthol AS-E phosphate is an inhibitor of the protein-protein interaction between CREB and the KIX domain of CREB-binding protein (CBP; $K_i = 50 \mu\text{M}$).¹ It also inhibits the binding of the transcription factor Myb to the KIX domains of p300 and CBP ($\text{IC}_{50}\text{s} = 30$ and $43 \mu\text{M}$, respectively).² Naphthol AS-E phosphate inhibits CREB-dependent transcription in HEK293T cells ($K_i = 10 \mu\text{M}$).¹ It also decreases the expression of Myb target genes and induces differentiation in HL-60, U937, and NB4 myeloid leukemia cells when used at a concentration of $5 \mu\text{M}$.² Naphthol AS-E phosphate inhibits proliferation of NCI-H1734 lung adenocarcinoma cells ($\text{IC}_{50} = 6.89 \mu\text{M}$).³

References

1. Best, J., Amezcua, C.A., Mayr, B., *et al.* Identification of small-molecule antagonists that inhibit an activator: Coactivator interaction. *Proc. Natl. Acad. Sci. USA* **101**(51), 17622-17627 (2004).
2. Uttarkar, S., Dukare, S., Bopp, B., *et al.* Naphthol AS-E phosphate inhibits the activity of the transcription factor Myb by blocking the interaction with the KIX domain of the coactivator p300. *Mol. Cancer Ther.* **14**(6), 1276-1285 (2015).
3. Lee, J.W., Park, H.S., Park, S.-A., *et al.* A novel small-molecule inhibitor targeting CREB-CBP complex possesses anti-cancer effects along with cell cycle regulation, autophagy suppression and endoplasmic reticulum stress. *PLoS One* **10**(4), e0122628 (2015).

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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