PRODUCT INFORMATION



ZM 336372

Item No. 10010367

CAS Registry No.: 208260-29-1

Formal Name: 3-(dimethylamino)-N-[3-[(4-

hydroxybenzoyl)amino]-4-

methylphenyl]-benzamide

MF: $C_{23}H_{23}N_3O_3$ FW: 389.4 **Purity:** ≥98%

UV/Vis.: λ_{max} : 264 nm Supplied as: A crystalline 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

ZM 336372 is supplied as a crystalline solid. A stock solution may be made by dissolving the ZM 336372 in the solvent of choice, which should be purged with an inert gas. ZM 336372 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ZM 336372 in these solvents is approximately

ZM 336372 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ZM 336372 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ZM 336372 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

The Ras/Raf-1 signalling pathway is a well-characterized system that links receptor tyrosine kinase (RTK) activation with changes in gene expression and cell behavior. Raf-1 is a serine/threonine protein kinase that phosphorylates and activates MAPK-kinase (MEK) in response to activation by Ras. ZM 336372 is a potent ATP-competitive inhibitor of Raf-1 in vitro ($IC_{50} = 70 \text{ nM}$) with the paradoxical effect of inducing >100-fold activation of Raf-1 in whole cells. Activation of the Raf-1 signalling pathway using ZM 336372 in human carcinoid tumor cells results in induction of cell cycle inhibitors and suppression of cellular proliferation.²

References

- 1. Hall-Jackson, C.A., Eyers, P.A., Cohen, P., et al. Paradoxical activation of Raf by a novel Raf inhibitor. Chem. Biol. 6(8), 559-568 (1999).
- 2. Van Gompel, J.J., Kunnimalaiyaan, M., Holen, K., et al. ZM336372, a Raf-1 activator, suppresses growth and neuroendocrine hormone levels in carcinoid tumor cells. Mol. Cancer Ther. 4(6), 910-917 (2005).

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

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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