

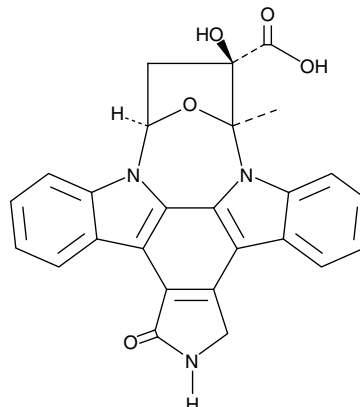
Product Information



K252b

Item No. 11339

CAS Registry No.: 99570-78-2
Formal Name: (9S,10R,12R)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-9,12-epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid
MF: C₂₆H₁₉N₃O₅
FW: 453.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 231, 250, 291, 336, 351, 368 nm



Laboratory Procedures

For long term storage, we suggest that K252b be stored as supplied at -20°C. It should be stable for at least two years.

K252b is supplied as a crystalline solid. A stock solution may be made by dissolving the K252b in the solvent of choice. K252b is soluble in methanol. The solubility of K252b in methanol is approximately 2 mg/ml.

K252b is an indolocarbazole isolated from the actinomycete *Nocardioopsis*, first described as an inhibitor of protein kinase C.¹ However, as this compound does not freely pass through the cell membrane, it is used to inhibit extracellular kinases (ectokinases) of cells in culture.^{2,3} K252b inhibits receptor-mediated degranulation from basophil-like RBL-2H3 cells (IC₅₀ = 0.5 µg/ml) and human basophils.⁴ This extracellular inhibitor is also used in comparison studies with the closely related, cell-permeable inhibitor K252a, particularly in studies of neuronal differentiation.^{5,6}

References

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3. Zhu, X., Luo, C., Ferrier, J.M., *et al.* Evidence of ectokinase-mediated phosphorylation of osteopontin and bone sialoprotein by osteoblasts during bone formation *in vitro*. *Biochem. J.* **323**, 637-643 (1997).
4. Teshima, R., Saito, Y., Ikebuchi, H., *et al.* Effect of an ectokinase inhibitor, K252b, on degranulation and Ca²⁺ signals of RBL-2H3 cells and human basophils. *J. Immunol.* **159(2)**, 964-969 (1997).
5. Thompson, A.F. and Levin, L.A. Neuronal differentiation by analogs of staurosporine. *Neurochem. Int.* **56(4)**, 554-560 (2010).
6. Kawamura, N., Kawamura, K., Manabe, M., *et al.* Inhibition of brain-derived neurotrophic factor/tyrosine kinase B signaling suppresses choriocarcinoma cell growth. *Endocrinology* **151(7)**, 3006-3014 (2010).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/11339

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

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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