

## Catalog # 10-2080 K-252a

CAS# 99533-80-9 Lot # X101234

Potent pan-specific protein kinase inhibitor: PKA ( $K_i = 18 \text{ nM}$ ), PKC ( $K_i = 25 \text{ nM}$ ) PKG ( $K_i = 20 \text{ nM}$ )<sup>1</sup>. Inhibits CaMK ( $K_i = 1.8 \text{ nM}$ )<sup>2</sup> and phosphorylase kinase ( $IC_{50} = 1.7 \text{ nM}$ )<sup>3</sup> as well as other kinases<sup>4</sup>. Induces apoptosis<sup>5</sup>. Cell permeable.

- 1) Kase et al. (1987), K-252 compounds, novel and potent inhibitors of protein kinase C and cyclic nucleotidedependent protein kinases; Biochem. Biophys. Res. Commun., **142** 436
- 2) Hashimoto et al. (1991), Potent and preferential inhibition of Ca2+/calmodulin-dependent protein kinase II by K252a and its derivative KT5926; Biochem. Biophys. Res. Commun., **181** 423
- 3) Berg et al. (1992), K-252a inhibits nerve growth factor-induced trk proto-ooncogene tyrosine phosphorylation and kinase activity; J. Biol. Chem., **267** 13
- 4) Ruegg et al. (1989), Staurosporine, K-252 and UCN-01: potent but non-specific inhibitors of protein kinases; Trends Pharmacol. Sci., **10** 218
- 5) Mohri et al. (1999), K252a induces cell cycle arrest and apoptosis by inhibiting Cdc2 and Cdc25c; Cancer Invest., 17 391

## **PHYSICAL DATA**

Molecular Weight: 467.49Molecular Formula:  $C_{27}H_{21}N_3O_5$ Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 100 mg/ml)
Physical Description: White or off-white solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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