

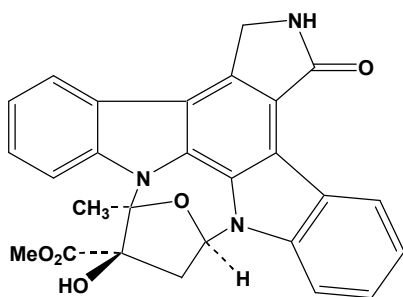
## Product Information

### K-252a Ready Made Solution from *Nonomuraea longicatena*

Catalog Number **K2015**  
Storage Temperature  $-20\text{ }^{\circ}\text{C}$

CAS RN 99533-80-9

#### Product Description



Molecular formula:  $\text{C}_{27}\text{H}_{21}\text{N}_3\text{O}_5$   
Formula Weight: 467.47

K-252a is an alkaloid isolated from *Nonomuraea longicatena*. K-252a is a potent inhibitor of Protein kinase A, Protein kinase C, and Protein kinase G.<sup>1</sup> It acts by competition with the ATP binding site with  $K_i$  values of 18–25 nM.<sup>1</sup> K-252a is also a specific inhibitor of Trk (Tyrosine kinase) receptors and thus, selectively blocks the effect of nerve growth factor (NGF).<sup>2-5</sup> At lower concentrations, K-252a acts as a neuroprotective compound prompting survival of primary neuronal cultures.<sup>6,7</sup> This alkaloid induces cell cycle arrest and apoptosis by inhibiting both Cdc2 and Cdc25c.<sup>8</sup> K-252a was found to improve psoriasis in a SCID mouse-human skin model<sup>9</sup> and to suppress referred mechanical hypersensitivity and neuropeptide up-regulation associated with acute pancreatitis.<sup>10</sup>

The K-252a, Ready Made Solution, is supplied as a 0.2  $\mu\text{m}$ -filtered 1 mM solution in dimethyl sulfoxide (DMSO).

Purity: >98% (HPLC)

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

Store the product sealed at  $-20\text{ }^{\circ}\text{C}$ . Under these conditions, the product is stable for at least 3 years.

#### References

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