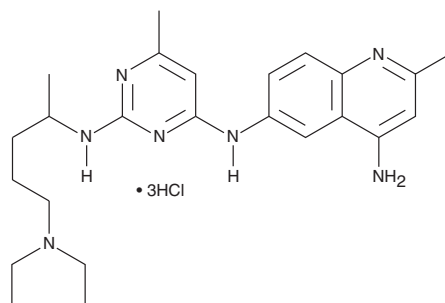


# PRODUCT INFORMATION

## NSC 23766 (hydrochloride)

Item No. 13196

**CAS Registry No.:** 1177865-17-6  
**Formal Name:** N<sup>6</sup>-[2-[[4-(diethylamino)-1-methylbutyl]amino]-6-methyl-4-pyrimidinyl]-2-methyl-4,6-quinolinediamine, trihydrochloride  
**MF:** C<sub>24</sub>H<sub>35</sub>N<sub>7</sub> • 3HCl  
**FW:** 531.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 219, 288, 324 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

NSC 23766 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the NSC 23766 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. NSC 23766 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of NSC 23766 (hydrochloride) in these solvents is approximately 3, 20, and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of NSC 23766 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of NSC 23766 (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Rac1 is a GTPase that is involved in the regulation of the cell cycle, cell-cell adhesion, motility, and differentiation.<sup>1</sup> Rac1 is activated by its interaction with specific guanine nucleotide exchange factors (GEFs). NSC 23766 is a cell-permeable, reversible inhibitor of Rac1 activation by the Rac-specific GEFs TrioN and Tiam 1 (IC<sub>50</sub> = 50 μM).<sup>2</sup> It has no effect on the closely related GTPases, Cdc42 and RhoA. NSC 23766 has been used to investigate the role of Rac1 in such diverse cellular functions as stem cell mobilization, epithelial cell migration, angiogenesis, leukemia cell migration and growth, and gene expression.<sup>3-7</sup>

### References

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4. Rao, J.N., Liu, S.V., Zou, T., et al. *Am. J. Physiol. Cell Physiol.* **295**(6), C1499-C1509 (2008).
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6. Wang, J., Rao, Q., Wang, M., et al. *Biochem. Biophys. Res. Commun.* **386**(4), 769-774 (2009).
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#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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