

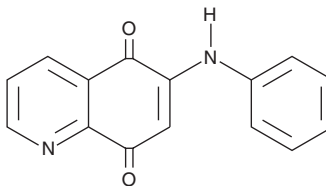
# PRODUCT INFORMATION



**LY83583**

Item No. 70230

**CAS Registry No.:** 91300-60-6  
**Formal Name:** 6-(phenylamino)-5,8-quinolinedione  
**MF:** C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 250.3  
**Purity:** ≥99%  
**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

LY83583 is supplied as a crystalline solid. A stock solution may be made by dissolving the XX in the solvent of choice, which should be purged with an inert gas. XX is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of LY83583 in ethanol is approximately 3.8 mg/ml and approximately 25 mg/ml in DMSO and DMF.

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 LY83583 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of LY83583 in PBS (pH 7.2) is approximately 100 µg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

LY83583 is an inhibitor of soluble guanylate cyclase and of cGMP production. It inhibits soluble guanylate cyclase in human platelets with an IC<sub>50</sub> value of 2 µM.<sup>1</sup>{4156} LY83583 also inhibits leukotriene synthesis in guinea pig lung and rat peritoneal cells with an IC<sub>50</sub> value of 1.8 µM and is a noncompetitive inhibitor of glutathione reductase in bovine intestinal mucosa with a K<sub>i</sub> value of 3 µM.<sup>2,3</sup>{4155,4372}

## References

1. Mülsch, A., Lückhoff, A., Pohl, U., *et al.* LY 83583 (6-anilino-5,8-quinolinedione) blocks nitrovasodilator-induced cyclic GMP increases and inhibition of platelet activation. *Naunyn Schmiedeberg's Arch. Pharmacol.* **340**, 119-125 (1989).
2. Fleisch, J.H., Haisch, K.D., Spaethe, S.M., *et al.* Pharmacologic analysis of two novel inhibitors of leukotriene (slow reacting substance) release. *J. Pharmacol. Exp. Ther.* **229**, 681-689 (1984).
3. Lüönd, R.M., McKie, J.H., and Douglas, K.T. A direct link between LY83583, a selective repressor of cyclic GMP formation, and glutathione metabolism. *Biochem. Pharmacol.* **45**, 2547-2549 (1993).

### 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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