

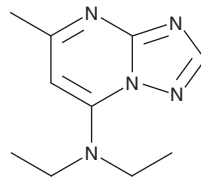
# PRODUCT INFORMATION



## Trapidil

Item No. 33496

**CAS Registry No.:** 15421-84-8  
**Formal Name:** N,N-diethyl-5-methyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-amine  
**Synonym:** Triazolopyrimidine  
**MF:** C<sub>10</sub>H<sub>15</sub>N<sub>5</sub>  
**FW:** 205.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 306 nm  
**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

Trapidil is supplied as a crystalline solid. A stock solution may be made by dissolving the trapidil in the solvent of choice, which should be purged with an inert gas. Trepidil is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of trapidil in these solvents is approximately 30 mg/ml.

Trapidil is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, trapidil should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Trepidil has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Trapidil is an inhibitor of PDGF-induced activity and an antiplatelet agent.<sup>1,2</sup> It inhibits PDGF-induced proliferation of U251MG glioma cells and isolated rat aortic smooth muscle cells in a concentration-dependent manner. Trepidil (1 mM) inhibits platelet aggregation induced by ADP, arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607), or U-46619 (Item No. 16450) in washed isolated human platelets.<sup>3</sup> It reduces increases in intimal thickness and prevents restenosis induced by balloon angioplasty in rabbits fed a high-cholesterol diet when administered at a dose of 30 mg/kg.<sup>4</sup>

### References

1. Kuratsu, J. and Ushio, Y. Antiproliferative effect of trapidil, a platelet-derived growth factor antagonist, on a glioma cell line *in vitro*. *J. Neurosurg.* **73**(3), 436-440 (1990).
2. Hoshiya, M. and Awazu, M. Trepidil inhibits platelet-derived growth factor-stimulated mitogen-activated protein kinase cascade. *Hypertension* **31**(2), 665-671 (1998).
3. Mazurov, A.V., Yu, M., Leytin, V.L., et al. Decrease of platelet aggregation and spreading via inhibition of the cAMP phosphodiesterase by trapidil. *FEBS Lett.* **172**(2), 167-171 (1984).
4. Liu, M.W., Roubin, G.S., Robinson, K.A., et al. Trepidil in preventing restenosis after balloon angioplasty in the atherosclerotic rabbit. *Circulation* **81**(3), 1089-1093 (1990).

#### 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.

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