

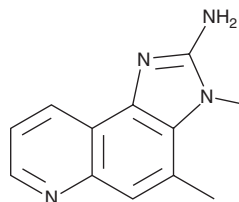
# PRODUCT INFORMATION



## 2-Amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline

Item No. 31509

**CAS Registry No.:** 77094-11-2  
**Formal Name:** 3,4-dimethyl-3H-imidazo[4,5-f]quinolin-2-amine  
**Synonym:** MeIQ  
**MF:** C<sub>12</sub>H<sub>12</sub>N<sub>4</sub>  
**FW:** 212.3  
**Purity:** ≥98%  
**Supplied as:** A 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

2-Amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline is supplied as a solid. A stock solution may be made by dissolving the 2-amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline in the solvent of choice, which should be purged with an inert gas. 2-Amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline is slightly soluble in methanol.

### Description

2-Amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline is a mutagenic heterocyclic amine that has been found in cooked foods.<sup>1-3</sup> It is mutagenic to *S. typhimurium* in the Ames test.<sup>3</sup> Dietary administration of 2-amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline (0.03%) induces tumor formation in the Zymbal gland, oral cavity, and colon in male and female rats, the skin of male rats, and the mammary gland in female rats.<sup>1</sup>

### References

1. Kato, T., Migita, H., Ohgaki, H., *et al.* Induction of tumors in the Zymbal gland, oral cavity, colon, skin and mammary gland of F344 rats by a mutagenic compound, 2-amino-3,4-dimethylimidazo[4,5-f]quinoline. *Carcinogenesis* **19(3)**, 601-603 (1989).
2. Johansson, M.A. and Jägerstad, M. Occurrence of mutagenic/carcinogenic heterocyclic amines in meat and fish products, including pan residues, prepared under domestic conditions. *Carcinogenesis* **15(8)**, 1511-1518 (1994).
3. Nagao, M., Sato, S., and Sugimura, T. Mutagens produced by heating foods. *The Maillard reaction in foods and nutrition*. American Chemical Society (1983).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM