



3050 Spruce Street  
Saint Louis, Missouri 63103 USA  
Telephone 800-325-5832 • (314) 771-5765  
Fax (314) 286-7828  
email: techserv@sial.com  
sigma-aldrich.com

## Product Information

### AMMC Iodide

Product Number **A 1352**

Storage Temperature -20 °C

Synonym: 3-[2-(N,N-diethyl-N-methylammonium)ethyl]-7-methoxy-4-methylcoumarin iodide

#### Product Description

Molecular Formula:  $C_{18}H_{26}INO_3$

Formula Weight: 431.3

AMMC iodide is a substrate for the human cytochrome P450 CYP2D6 isozyme. It is demethylated to the fluorescent product 3-[2-(N,N-diethyl-N-methyl ammonium)ethyl]-7-hydroxy-4-methylcoumarin (AMHC). The enzymatic reaction may be performed in a multiwell plate. After the AMMC is hydrolyzed, the pH is increased by addition of base for optimal fluorescence detection. AMMC has been used with human liver microsomes to determine CYP2D6 activity and inhibition.

#### Precautions and Disclaimer

This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

This substrate is light sensitive and should be protected from direct sunlight or UV sources.

#### Storage/Stability

The product ships on wet ice and it is recommended to store the product at -20 °C.

#### Reference

1. Chauret, N. et al., The use of 3-[2-(N,N-diethyl-N-methylammonium)ethyl]-7-methoxy-4-methylcoumarin as a specific CYP2D6 probe in human liver microsomes. *Drug Metab. Dispos.*, **29(9)**, 1196-2000 (2001).

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