Mitragynine  
Item No. 11151

CAS Registry No.: 4098-40-2  
Formal Name: \((\alpha E,2S,3S,12bS)-3\text{-ethyl-1,2,3,4,6,7,12b-octahydro-8-methoxy-}\)
\(\alpha\text{-methoxymethylene})\text{-indolo}\{2,3-a\}\text{-quinolizine-2-acetic acid, methyl ester}\)  
Synonyms: 9-methoxy Corynantheidine, Kratom  
MF: \(C_{23}H_{30}N_2O_4\)  
FW: 398.5  
Purity: \(\geq 95\%\)

### Description

Mitragynine is an indole alkaloid from the plant *M. speciosa*. It has stimulatory, antinociceptive, and opioid-like effects, acting through noradrenergic, serotonergic, and opioid receptors.\(^1\) Mitragynine has a higher affinity for the \(\mu\)-opioid receptor than the \(\delta\)- or \(\kappa\)-opioid receptors (\(pK_i = 8.14, 7.22, \text{and } 5.96, \text{respectively}\)).\(^2\) Mitragynine and its derivatives have been identified in products sold as incense.\(^3\) The identification and quantification of mitragynine and related alkaloids, as well as their phase I and II metabolites, have been described.\(^4-6\) This product is intended for forensic applications.

This product is a qualified Reference Material (RM) that has been manufactured and tested to meet ISO17025 and Guide 34 guidelines. These materials are tested using validated analytical methods on qualified instrumentation to ensure traceability of measurements. All traceable RMs may be distinguished by their CofAs and can be downloaded below using the batch number located on the product label. For a representative CofA please contact our technical support.

### References