# **PRODUCT** INFORMATION



## **Bruceine A**

Item No. 29936

CAS Registry No.: Formal Name:	25514-31-2 (11 $\beta$ ,12 $\alpha$ ,15 $\beta$ )-13,20-epoxy- 3,11,12-trihydroxy-15-(3-methyl- 1-oxobutoxy)-2,16-dioxo-picras-3- en-21-oic acid, methyl ester	HO
Synonyms: MF: FW: Purity: UV/Vis.: Supplied as:	Dihydrobrusatol, NSC 310616 $C_{26}H_{34}O_{11}$ 522.5 ≥98% $\lambda_{max}$ : 278 nm A solid	
Storage:	-20°C	
Stability:	≥4 years	
Item Origin:	Plant/Brucea javanica	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

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## Description

Bruceine A is a quassinoid that has been found in B. javanica and has diverse biological activities.<sup>1-3</sup> It is active against *T. evansi* ( $IC_{50} = 0.017 \mu g/mI$ ).<sup>1</sup> Bruceine A induces lipolysis in 3T3-L1 adipocytes when used at a concentration of 160 nM.<sup>2</sup> It is cytotoxic to HT-29, HeLa, and HL-60 cells ( $IC_{50}s = 1.6, 0.6, and 0.069$ )  $\mu$ g/ml, respectively) and inhibits NF- $\kappa$ B activity in HeLa cell extracts (IC<sub>50</sub> = 2.2  $\mu$ g/ml).<sup>3</sup>

## References

- 1. Elkhateeb, A., Tosa, Y., Matsuura, H., et al. Antitrypanosomal activities of acetylated bruceines A and C; A structure-activity relationship study. J. Nat. Med. 66(1), 233-240 (2012).
- 2. Lahrita, L., Moriai, K., Iwata, R., et al. Quassinoids in Brucea javanica are potent stimulators of lipolysis in adipocytes. Fitoterapia 137, 104250 (2019).
- 3. Kim, J.-A., Lau, E.K., Pan, L., et al. NF-κB Inhibitors from Brucea javanica exhibiting intracellular effects on reactive oxygen species. Anticancer Res. 30(9), 3295-3300 (2010).

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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