

# PRODUCT INFORMATION

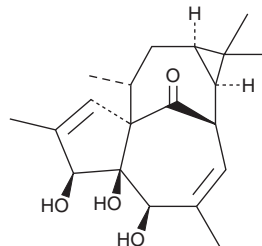


## 20-Deoxyingenol

Item No. 33225

CAS Registry No.: 54706-99-9  
Formal Name: 1aR,2S,5R,5aS,6S,9,10,10aR-octahydro-5,5a,6-trihydroxy-1,1,4,7,9R-pentamethyl-1H-2,8aS-methanocyclopenta[a]cyclopropa[e]cyclodecen-11-one

MF:  $C_{20}H_{28}O_4$   
FW: 332.4  
Purity:  $\geq 98\%$   
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 4$  years  
Item Origin: Plant/*Herba Epimedii*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

20-Deoxyingenol is supplied as a crystalline solid. A stock solution may be made by dissolving the 20-deoxyingenol in the solvent of choice, which should be purged with an inert gas. 20-Deoxyingenol is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 20-deoxyingenol in these solvents is approximately 1 mg/ml.

### Description

20-Deoxyingenol is a diterpenoid that has been found in *E. kansui* and has antioxidant and osteoprotective activities.<sup>1,2</sup> It inhibits oxidative stress-induced decreases in autophagic flux and apoptosis in isolated mouse chondrocytes when used at a concentration of 10 mM.<sup>2</sup> 20-Deoxyingenol (20 mg/kg per day, i.p.) reduces bone erosion and cartilage calcification in joints in a mouse model of injury-induced osteoarthritis.

### References

1. Zhang, J.-S., Weng, H.-Z., Huang, J.-L., *et al.* Anti-inflammatory ingenane diterpenoids from the roots of *Euphorbia kansui*. *Planta Med.* **84**(18), 1334-1339 (2018).
2. Gu, M., Jin, J., Ren, C., *et al.* 20-Deoxyingenol alleviates osteoarthritis by activating TFEB in chondrocytes. *Pharmacol. Res.* **165**, 105361 (2021).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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