

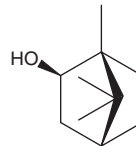
PRODUCT INFORMATION



Isoborneol

Item No. 23177

CAS Registry No.: 124-76-5
Formal Name: (1R,2R,4R)-*rel*-1,7,7-trimethyl-bicyclo[2.2.1]heptan-2-ol
Synonyms: (±)-Isoborneol, DL-Isoborneol, Isobornyl Alcohol, NSC 26350
MF: C₁₀H₁₈O
FW: 154.3
Purity: ≥95%
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

Isoborneol is supplied as a solid. A stock solution may be made by dissolving the isoborneol in the solvent of choice, which should be purged with an inert gas. Isoborneol is slightly soluble in chloroform.

Description

Isoborneol is a monoterpene alcohol that has been found in a variety of plants, including *C. sativa*, *C. indica*, and *C. sativa/C. indica* hybrid strains, with neuroprotective and antiviral activities.¹⁻³ It reduces SH-SY5Y cell death induced by 6-OHDA (Item No. 25330) when used at concentrations ranging from 2.5 to 10 μM *via* inhibition of apoptosis, reducing increases in intracellular levels of reactive oxygen species (ROS), and preventing decreases in the mitochondrial membrane potential.² Isoborneol (0.03 and 0.06%) reduces HSV-1 viral replication by inhibiting viral protein synthesis.³ It inhibits the glycosylation of HSV-1 glycoprotein gB but has no effect on protein glycosylation in Vero cells.

References

1. Elzinga, S., Fishedick, J., Podkolinski, R., *et al.* Cannabinoids and terpenes as chemotaxonomic markers in cannabis. *Nat. Prod. Chem. Res.* **3**(4), 181 (2015).
2. Tian, L.-L., Zhou, Z., Zhang, Q., *et al.* Protective effect of (±) isoborneol against 6-OHDA-induced apoptosis in SH-SY5Y cells. *Cell. Physiol. Biochem.* **20**(6), 1019-1032 (2007).
3. Armaka, M., Papanikolaou, E., Sivropoulou, A., *et al.* Antiviral properties of isoborneol, a potent inhibitor of herpes simplex virus type 1. *Antiviral Res.* **43**(2), 79-92 (1999).

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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