PRODUCT INFORMATION



Propofol Sulfate (sodium salt)

Item No. 9002416

Formal Name: 1-(hydrogen sulfate) 2,6-bis(1-methylethyl)-phenol,

monosodium salt

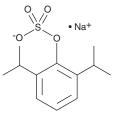
MF: C₁₂H₁₇O₄S • Na

FW: 280.3 **Purity:** ≥98%

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥5 years

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



Description

Propofol is a short-acting anesthetic agent that acts as a potentiator of the GABA_Δ receptor $(EC_{50} = 10 \ \mu M)$.¹⁻⁴ It also has direct activation effects at the GABA_A receptor, alters receptor desensitization and deactivation, and blocks channel activity.² Propofol shows little or no specificity among the diverse GABA_A receptor subunits.² Intravenous injection of propofol is usually accompanied with pain due to activation of the transient receptor potential ankyrin 1 channel.⁵

References

- 1. Sooksawate, T. and Simmonds, M.A. Influence of membrane cholesterol on modulation of the GABA receptor by neuroactive steroids and other potentiators. Brit. J. Pharmacol. 134, 1303-1311 (2001).
- 2. Krasowski, M.D., Hong, X., Hopfinger, A.J., et al. 4D-QSAR analysis of a set of propofol analogues: Mapping binding sites for an anesthetic phenol on the GABA $_{\Delta}$ receptor. J. Med. Chem. 45(15), 3210-3221
- 3. Lingamaneni, R. and Hemmings, H.C., Jr. Differential interaction of anaesthetics and antiepileptic drugs with neuronal Na⁺ channels, Ca²⁺ channels, and GABA_Δ receptors. Br. J. Anaesth. 90(2), 199-211 (2003).
- Li, M., Zhao, X., Zhang, L., et al. Effects and safety of magnesium sulfate on propofol-induced injection pain, a meta-analysis of randomized controlled trials. Int. J. Clin. Exp. Med. 8(5), 6813-6821 (2015).
- Baraldi, P.G., Preti, D., Materazzi, S., et al. Transient receptor potential ankyrin 1 (TRPA1) channel as emerging target for novel analgesics and anti-inflammatory agents. J. Med. Chem. 53(14), 5085-5107 (2010).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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