LKT Laboratories, Inc.

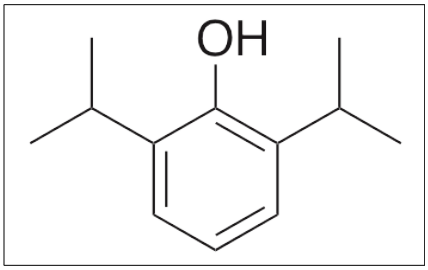
Propofol

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID P6870
CAS No. 2078-54-8
Chemical Name

Synonym 2,6-Bis(isopropyl)phenol, 2,6-Diisopropylphenol



Formula $C_{12}H_{18}O$
Formula Wt. 178.27
Melting Point
Purity ≥98%
Solubility 100mM in DMSO and ethanol

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
P6870	5 g	$33.20
P6870	25 g	$63.70
P6870	100 g	$104.50

Store Temp Ambient
Ship Temp Ambient

Description Propofol is an agonist at GABA-A receptors and antagonist at voltage-gated Na+ channels and NMDA receptors; it also modulates Ca2+ signaling. Propofol displays anesthetic, sedative/hypnotic, neuroprotective, and nephroprotective activities. Propofol is a short-acting intravenous anesthetic that depresses the central nervous system, decreases cerebral blood flow, and decreases intracranial pressure. In a middle cerebral artery occlusion (MCAO) model of cerebral ischemia/reperfusion, propofol decreases expression of aquaporins 1 and 4 (AQ-1 and AQ-4), matrix metalloproteinases 2 and 9 (MMP2/9), and HIF-1α, decreasing edema and disruption of the blood-brain barrier. Propofol also increases expression of μ-opioid receptors in neuroblastoma cells. Additionally, this compound normalizes osmolality, serum creatine, and levels of AQP-2, ICAM-1, TNF-α, Bcl-2, and Bax in kidneys, improving renal function in animal models of endotoxemia-induced kidney injury.

References

Lee JH, Cui HS, Shin SK, et al. Effect of propofol post-treatment on blood-brain barrier integrity and cerebral edema after transient cerebral ischemia in rats. Neurochem Res. 2013 Nov;38(11):2276-86. PMID: 23990224.

Li Z, Pei Q, Cao L, et al. Propofol increases μ-opioid receptor expression in SH-SY5Y human neuroblastoma cells. Mol Med Rep. 2012 Dec;6(6):1333-6. PMID: 22965315.

Cui WY, Tian AY, Bai T. Protective effects of propofol on endotoxemia-induced acute kidney injury in rats. Clin Exp Pharmacol Physiol. 2011 Nov;38(11):747-54. PMID: 21824173.

Kotani Y, Shimazawa M, Yoshimura S, et al. The experimental and clinical pharmacology of propofol, an anesthetic agent with neuroprotective properties. CNS Neurosci Ther. 2008 Summer;14(2):95-106. PMID: 18482023.

Salmi E, Kaisti KK, Metsähonkala L, et al. Sevoflurane and propofol increase 11C-flumazenil binding to gamma-aminobutyric acidA receptors in humans. Anesth Analg. 2004 Nov;99(5):1420-6. PMID: 15502041.

Yamanoue T, Brum JM, Estafanous FG. Vasodilation and mechanism of action of propofol in porcine coronary artery. Anesthesiology. 1994 Aug;81(2):443-51. PMID: 8053594.