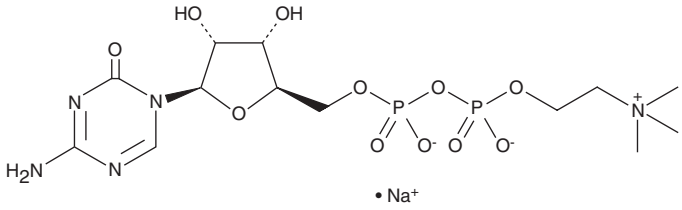
PRODUCT INFORMATION

Citicoline (sodium salt)

Item No. 14629

CAS Registry No.:	33818-15-4
Formal Name:	P'-[2-(trimethylammonio)ethyl] ester-cytidine 5'-(trihydrogen diphosphate)-inner, monosodium salt
Synonyms:	Cytidine 5'-diphosphocholine, Flussorex, Gerolin, Logan, Neurotron, Sinkron
MF:	$C_{14}H_{25}N_4O_{11}P_2 \bullet Na$
FW:	510.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 274 nm
Supplied as:	A crystalline 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

Citicoline (sodium salt) is supplied as a crystalline solid. Aqueous solutions of citicoline (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of citicoline (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Citicoline is an endogenous intermediate in the synthesis of phosphatidylcholine, the major phospholipid in eukaryotic cells.[1] It also serves as a choline donor in the biosynthesis of the neurotransmitter acetylcholine. Citicholine demonstrates protective effects in cerebral ischemia, traumatic brain injury, and memory disorders.[2] Exogenous administration of citicholine to rodents (500 mg/kg i.p. immediately after ischemia and at 3-h reperfusion) has been shown to stimulate the synthesis of phosphatidylcholine, sphingomyelin, and cardiolipin and to attenuate the release of arachidonic acid and the accumulation of ceramide.[3]

References

1. McMaster, C.R., and Bell, R.M. Phosphatidylcholine biosynthesis via the CDP-choline pathway in *Saccharomyces cerevisiae*. *J. Biol. Chem.* **269(20)**, 14776-14783 (1994).
2. Dávalos, A. and Secades, J. Citicoline preclinical and clinical update 2009-2010. *Stroke* **42(1)**, 36-39 (2011).
3. Rao, M., Hatcher, J.F., and Dempsey, R.J. Lipid alterations in transient forebrain ischemia: Possible new mechanisms of CDP-choline neuroprotection. *J. Neurochem.* **75(6)**, 2528-2535 (2000).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM