

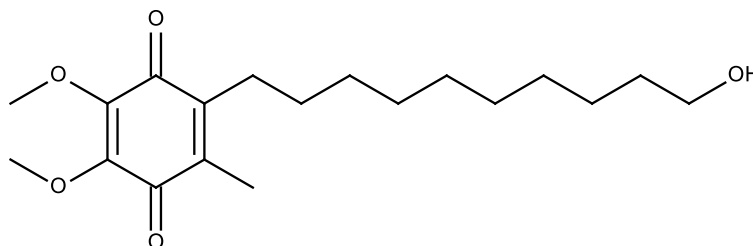
Catalog # 10-1130

Idebenone

CAS# 58186-27-9

2-(10-Hydroxydecyl)-5,6-dimethoxy-3-methyl-cyclohexa-2,5-diene-1,4-dione

Lot # X101306



Analog of coenzyme Q10 which acts as an antioxidant¹. Protects mitochondrial membranes against lipid peroxidation and blocks glutamate neurotoxicity *in vitro* and *in vivo*². Increases NGF production with no effect on reactive oxygen species in a cultured rat astrocyte reperfusion injury model³. Extends lifespan and improves motor function in HtrA2 knockout mice⁴.

- 1) Zs-Nagy (1990) *Chemistry, toxicology, pharmacology and pharmacokinetics of idebenone: a review*; Gerontol. Geriatr., **11**, 177
- 2) Civenni et al. (1999) *Inhibitory effect of the neuroprotective agent idebenone on arachidonic acid metabolism in astrocytes*; Eur.J.Pharmacol. **370** 161
- 3) Takuma et al. (2000) *CV-2619 protects cultured astrocytes against reperfusion injury via nerve growth factor production*; Eur. J. Pharmacol., **406** 333
- 4) Gerhardt et al. (2011) *Idebenone and resveratrol extend lifespan and improve motor function of HtrA2 knockout mice*; PloS One, **6** e28855

PHYSICAL DATA

Molecular Weight:	338.44
Molecular Formula:	C ₁₉ H ₃₀ O ₅
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (at least 25 mg/ml)
Physical Description:	Orange solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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