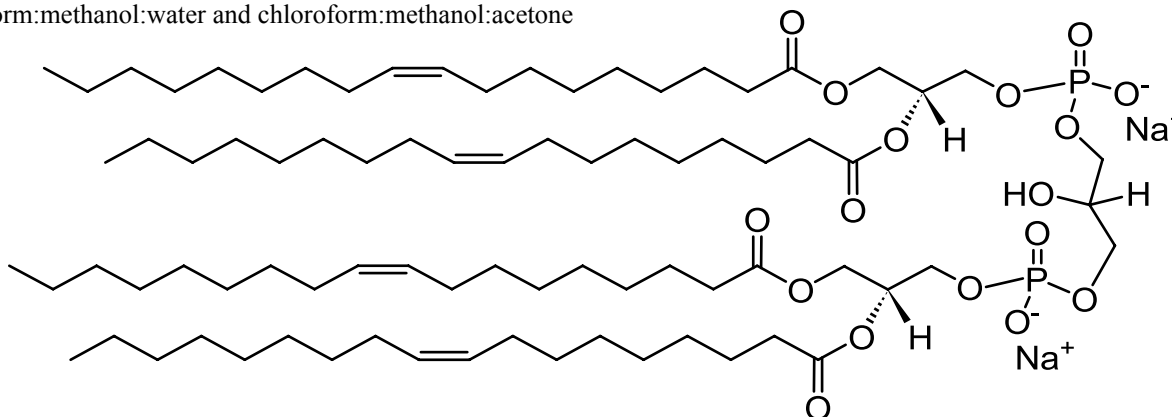


TECHNICAL DATA SHEET

1,1',2,2' Tetraoleoyl Cardiolipin (sodium salt)

Catalog Number	710335	Physical state	Powder; chloroform solution
Purity	> 99%	Transition temp.	No data
CAS	115404-77-8	CMC	No data
Synonyms	18:1 CA	PKA	No data
Molec. Formula	$C_{81}H_{148}O_{17}P_2Na_2$	TLC mobile phase	C:M:W & C:M:A*, 65:25:4, v/v; C:Hexane:M:Acetic Acid 50:30:10:5, v/v, if want to see PG
MW	1,501.000	Exact Mass	1,501.000
Percent composition	C 64.77% H 9.93% O 18.11% P 4.12% Na 3.06%		
Stability	Store in <-20°C freezer for 6 months		
Solubility	Soluble in chloroform and alcohol (warmed with water content 3-5%) at concentrations up to 10 mg/mL. Insoluble in water and acetone.		
Web link	710335		

* chloroform:methanol:water and chloroform:methanol:acetone



Description:

Cardiolipin, the mitochondrial-specific phospholipid, helps maintain mitochondrial function, membrane potential and structural support for the inner mitochondrial membrane and the proteins in it (Chicco and Sparagna, 2007). Concentration and composition changes of cardiolipin have been implicated in pathological conditions including ischemia, hypothyroidism, aging, heart failure and cardioskeletal myopathy (Barth syndrome) (Chicco and Sparagna, 2007). Cardiolipin has also been shown as a signaling molecule in apoptosis (Kagan et al, 2006; Ritov et al, 2006).

Product use:

Soluble in chloroform and alcohol (warmed with water content 3-5%) at concentrations up to 10 mg/mL. Insoluble in water and acetone. Also used in liposomes. Please use the following web link for [liposome preparation](#).

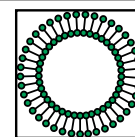
References:

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- Kagan et al (2006). The "pro-apoptotic genes" get out of mitochondria: oxidative lipidomics and redox activity of cytochrome c/cardiolipin complexes. *Chem Biol Interact* 163(1-2): 15-28
- Ritov et al (2006). Analysis of cardiolipin in human muscle biopsy. *J Chromatogr B* 831:63-71

Related products: [cardiolipins](#)

MSDS: see www.avantilipids.com for product number 710335

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