

Product data sheet



MedKoo Cat#: 532063 Name: L659989 CAS: 113787-28-3 Chemical Formula: C ₂₄ H ₃₂ O ₈ S Exact Mass: 480.1818 Molecular Weight: 480.572		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

L659989 is a PAF receptor antagonist.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.08 mL	10.40 mL	20.81 mL
5 mM	0.42 mL	2.08 mL	4.16 mL
10 mM	0.21 mL	1.04 mL	2.08 mL
50 mM	0.04 mL	0.21 mL	0.42 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Gómez-Muñoz A, O'Brien L, Steinbrecher UP. The platelet-activating factor receptor antagonist L-659,989 inhibits phospholipase D activity. *Biochim Biophys Acta*. 1999 May 18;1438(2):247-52. doi: 10.1016/s1388-1981(99)00056-6. PMID: 10320807.

2. Parker AL, Likar LL, Dawicki DD, Rounds S. Mechanism of ATP-induced leukocyte adherence to cultured pulmonary artery endothelial cells. *Am J Physiol*. 1996 May;270(5 Pt 1):L695-703. doi: 10.1152/ajplung.1996.270.5.L695. PMID: 8967502.

In vivo study

1. Stotland MA, Kerrigan CL. The role of platelet-activating factor in musculocutaneous flap reperfusion injury. *Plast Reconstr Surg*. 1997 Jun;99(7):1989-99; discussion 2000-1. doi: 10.1097/00006534-199706000-00026. PMID: 9180723.

2. Herbertson MJ, Werner HA, Walley KR. Platelet-activating factor antagonism improves ventricular contractility in endotoxemia. *Crit Care Med*. 1997 Feb;25(2):221-6. doi: 10.1097/00003246-199702000-00004. PMID: 9034254.

7. Bioactivity

Biological target:

L659989 is a PAF receptor antagonist.

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In vitro activity

At concentrations of 30 micrograms/ml, L-659,989 inhibited basal and agonist-stimulated phospholipase D activity by about 55% and 70-100% respectively, through a mechanism that may involve the generation of intracellular ceramides. Furthermore, L-659,989 directly inhibited the activity of bacterial PLD in vitro.

Reference: Biochim Biophys Acta. 1999 May 18;1438(2):247-52. <https://pubmed.ncbi.nlm.nih.gov/10320807/>

In vivo activity

The specific platelet-activating factor receptor antagonist L-659,989 is beneficial to the survival of both pig muscle and skin flap components, a single, prereperfusion local dose of this lipophilic drug remains concentrated within the flap during the early inflammatory phase of reperfusion, and during reperfusion, platelet-activating factor antagonism is able to directly or indirectly diminish the accumulation of acute inflammatory cells in musculocutaneous flaps.

Reference: Plast Reconstr Surg. 1997 Jun;99(7):1989-99; discussion 2000-1. <https://pubmed.ncbi.nlm.nih.gov/9180723/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.