

**Product Name:** U 73122

**Catalog No.:** 1268

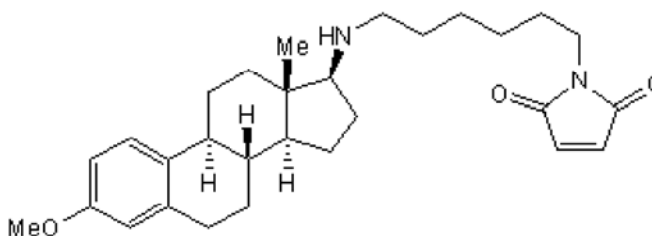
**Batch No.:** 12

CAS Number: 112648-68-7

IUPAC Name: 1-[6-[[[(17 $\beta$ )-3-Methoxyestra-1,3,5(10)-trien-17-yl]amino]hexyl]-1H-pyrrole-2,5-dione

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>29</sub> H <sub>40</sub> N <sub>2</sub> O <sub>3</sub>
<b>Batch Molecular Weight:</b>	464.65
<b>Physical Appearance:</b>	Pale yellow solid
<b>Solubility:</b>	Please refer to Solubility & Usage Information on Product Information sheet.
<b>Storage:</b>	Store at RT
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>TLC:</b>	R <sub>f</sub> = 0.35 (Chloroform:Methanol [9:1])
<b>HPLC:</b>	Shows >99.7% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure
<b>Microanalysis:</b>	
	Carbon Hydrogen Nitrogen
	Theoretical 74.96 8.68 6.03
	Found 74.79 8.78 6.03

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Phospholipase C inhibitor. Inhibits agonist-induced platelet aggregation with IC<sub>50</sub> values of 1-5  $\mu$ M. Potently inhibits human polymorphonuclear neutrophil adhesion on biological surfaces (IC<sub>50</sub> < 50 nM) and exhibits antinociceptive activity in vivo. Also activates TRPM4 and inhibits TRPM3 channels. Negative Control also available.

**Physical and Chemical Properties:**

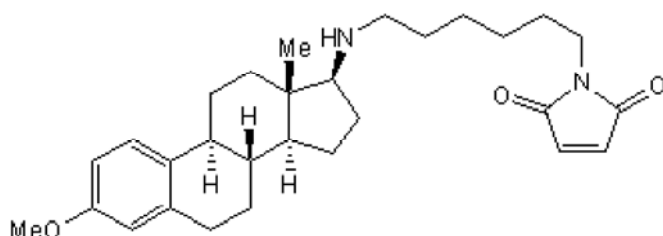
Batch Molecular Formula: C<sub>29</sub>H<sub>40</sub>N<sub>2</sub>O<sub>3</sub>

Batch Molecular Weight: 464.65

Physical Appearance: Pale yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Solubility & Usage Info:**

Solubility: U 73122 is only sparingly soluble in aq. media and solvents such as DMSO and EtOH. Hence U 73122 can be delivered to cells either after dissolving in organic solvents or complexing with serum proteins. We recommend that a weighed amount of U 73122 is dissolved in DCM or CHCl<sub>3</sub>, in which the product is soluble to 100mM. Dispense this solution into aliquots sufficient for one experiment and evaporate the solvent with a stream of nitrogen to leave a thin, dry film which may be more easily dissolved in DMSO or EtOH. U 73122 is soluble to at least 5 mM in DMSO and at least 2 mM in 100% EtOH using this approach. Alternatively dissolve the thin film in an aq. medium of serum or serum albumin (1-10 mg/mL). U 73122 will form a soluble complex with serum albumin, thus avoiding the use of organic solvents. Stability & Storage: It is best to dissolve U 73122 in DMSO or EtOH immediately before use. Use caution in reusing stored DMSO solutions of U 73122 and discard solutions that have turned a pink color as this indicates a loss of inhibitory activity. In general, store U 73122 solutions at -20° to -80°C and discard after two months. Solid U 73122 as supplied by Tocris should be stable for at least six months. Dried aliquots prepared from CHCl<sub>3</sub> solutions should be stored at -20° or -80°C for no more than one month.

**Licensing Information:**

Sold with the permission of Pharmacia

**References:**

**Leitner et al** (2016) Direct modulation of TRPM4 and TRPM3 channels by the phospholipase C inhibitor U73122. Br.J.Pharmacol. **173** 2555. PMID: 27328745 .

**Shi et al** (2008) Phospholipase C $\beta$ 3 in mouse and human dorsal root ganglia and spinal cord is a possible target for treatment of neuropathic pain. Proc.Natl.Acad.Sci.U.S.A. **105** 20004. PMID: 19066214.

**Smith et al** (1996) U-73122: a potent inhibitor of human polymorphonuclear neutrophil adhesion on biological surfaces and adhesion-related effector functions. J.Pharmacol.Exp.Ther. **278** 320. PMID: 8764366.

**Bleasdale et al** (1990) Selective inhibition of receptor-coupled phospholipase C-dependent processes in human platelets and polymorphonuclear neutrophils. J.Pharmacol.Exp.Ther. **255** 756. PMID: 2147038.

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