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**Product Data Sheet**

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Product Name: U-92016A

Cat. No.: GC18962

**Chemical Properties**

Cas. No. 149654-41-1

Chemical Name (8R)-8-(dipropylamino)-6,7,8,9-tetrahydro-3H-benz[e]indole-2-carbonitrile, monohydrochloride

SMILES CCCN(CCC)[C@@H](C1)CCC2=C1C(C=C(C#N)N3)=C3C=C2.ClFormula  $C_{19}H_{25}N_3.HCl$  M.Wt 331.9

Solubility DMF: 5 mg/ml, DMSO: 20 mg/ml, Ethanol: 1 mg/ml, PBS (pH 7.2): 0.1 mg/ml Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure **Background**

U-92016A is an agonist of the serotonin (5-HT) receptor subtype 5-HT<sub>1A</sub> ( $K_i = 0.4$  nM). It is selective for 5-HT<sub>1A</sub> over 5-HT<sub>1D</sub>, 5-HT<sub>2</sub>, dopamine D<sub>1</sub> and D<sub>2</sub>, and  $\alpha_1$ - and  $\alpha_2$ -adrenergic receptors ( $K_i$ s = 7.7, >1,000, >1,000, 36, >1,000, and >1,000 nM, respectively). U-92016A inhibits forskolin-stimulated cAMP synthesis in CHO cells transfected with human 5-HT<sub>1A</sub>. In vivo, U-92016A induces hypothermia in mice (ED<sub>50</sub> = 0.041 mg/kg). It induces 5-HT syndrome, as measured by increased flat body posture and reciprocal forepaw treading, as well as decreases accumulation of 5-HT and dopamine in rats when administered at a dose of 5 mg/kg. U-92016A also decreases arterial blood pressure and heart rate in a dose-dependent manner in spontaneously hypertensive rats and reverses isolation-induced aggression in mice.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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