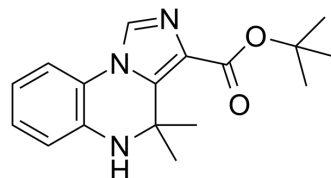


## U93631

<b>Cat. No.:</b>	HY-100686		
<b>CAS No.:</b>	152273-12-6		
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>21</sub> N <sub>3</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	299.37		
<b>Target:</b>	GABA Receptor		
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 34 mg/mL (113.57 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		3.3403 mL	16.7017 mL	33.4035 mL
	5 mM		0.6681 mL	3.3403 mL	6.6807 mL
	10 mM		0.3340 mL	1.6702 mL	3.3403 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

U93631 is a GABAA receptor ligand of novel chemical structure with IC<sub>50</sub> of 100 nM, and has been shown to induce a rapid, time-dependent decay of GABA-induced whole-cell Cl<sup>-</sup> currents in recombinant GABAA receptors. target: GABAA receptor[1] In vitro: In the presence of U93631 at 5 μM, the peak amplitude decreased as a function of GABA concentration, with the half-maximal inhibitory concentration being approximately 100 nM, which is close to the K<sub>d</sub> for the high affinity GABA site (85 nM). It appears that the drug interacts with GABA-bound receptors (at least monoliganded) and accelerates receptor desensitization, rather than acting as an open channel blocker. [1]

### REFERENCES

[1]. Dillon, GH et al. U-93631 causes rapid decay of gamma-aminobutyric acid-induced chloride currents in recombinant rat gamma-aminobutyric acid type A receptors. *Molecular Pharmacology* October 1993, 44 (4) 860-865

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

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