

## Yonkenafil

## Chemical Properties

CAS No. :	804518-63-6
Formula:	C <sub>24</sub> H <sub>33</sub> N <sub>5</sub> O <sub>4</sub> S
Molecular Weight:	487.61
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

## Biological Description

Description	Yonkenafil (Tunodafil) is a novel Phosphodiesterase type 5 inhibitor. In experimental studies, Yonkenafil has been reported to alleviate brain injury, neurological deficits, edema, and neuronal damage in ischemic stroke models. By modulating cGMP-related signaling and neurogenesis, Yonkenafil has shown potential to improve cognitive function in animal studies and is therefore investigated for Alzheimer's disease-related mechanisms.
Targets(IC50)	PDE
In vivo	Yonkenafil (4-32 mg/kg, administered intravenously daily for 7 days) improves behavioral outcomes following stroke, reduces cerebral infarct volume, inhibits neuronal apoptosis, and significantly enhances synaptic function in the ischemic brain by regulating the expression of BDNF/TrkB and NGF/TrkA [1].

## Solubility Information

Solubility	DMSO: 80 mg/mL (164.07 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.0508 mL	10.2541 mL	20.5082 mL
5 mM	0.4102 mL	2.0508 mL	4.1016 mL
10 mM	0.2051 mL	1.0254 mL	2.0508 mL
50 mM	0.041 mL	0.2051 mL	0.4102 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Xuemei Chen, et al. Yonkenafil: a novel phosphodiesterase type 5 inhibitor induces neuronal network potentiation by a cGMP-dependent Nogo-R axis in acute experimental stroke. *Exp Neurol*. 2014 Nov;261:267-77.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481