

# Desvenlafaxine

## Catalog No: tcsc2818



### Available Sizes

**Size:** 5mg

**Size:** 10mg



### Specifications

**CAS No:**

93413-62-8

**Formula:**

$C_{16}H_{25}NO_2$

**Pathway:**

Neuronal Signaling

**Target:**

Serotonin Transporter

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

O-Desmethylvenlafaxine

**Observed Molecular Weight:**

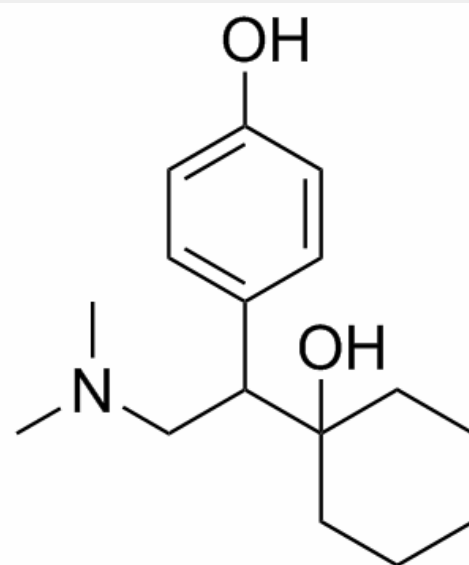
263.38

### Product Description

Desvenlafaxine is a serotonin (5-HT) and norepinephrine (NE) reuptake inhibitor with  $K_i$  of 40.2 nM and 558.4 nM, respectively.

Target: SSRIs

Desvenlafaxine is a serotonin-norepinephrine reuptake inhibitor and is the active metabolite of the antidepressant venlafaxine. Similar to venlafaxine, desvenlafaxine inhibits the neuronal uptake of serotonin and norepinephrine. Desvenlafaxine shows weak binding affinity (62% inhibition at 100  $\mu$ M) at the human dopamine (DA) transporter. Desvenlafaxine inhibits [3H]5-HT or [3H]NE uptake for the hSERT or hNET with IC<sub>50</sub> of 47.3 and 531.3 nM, respectively. Desvenlafaxine rapidly penetrates the male rat brain and hypothalamus. Desvenlafaxine significantly increases extracellular NE levels compared with baseline in the male rat hypothalamus but had no effect on DA levels using microdialysis [1]. Desvenlafaxine has the potential to inhibit CYP2D6, which could result in increased concentrations of drugs metabolized through this pathway. Induction of CYP3A4 is also possible with desvenlafaxine, which could impact the metabolism of drugs metabolized via this enzyme. Desvenlafaxine exhibits a linear and dose-proportional pharmacokinetic single-dose profile in a dose range from 100 to 600 mg/day. The absolute bioavailability of the oral formulation is 80.5% [2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!