

# Gabapentin enacarbil

Catalog No: tcsc1698



## Available Sizes

**Size:** 5mg

**Size:** 10mg



## Specifications

**CAS No:**

478296-72-9

**Formula:**

$C_{16}H_{27}NO_6$

**Pathway:**

Membrane Transporter/Ion Channel

**Target:**

Calcium Channel

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

XP-13512

**Observed Molecular Weight:**

329.39

## Product Description

Gabapentin enacarbil (XP-13512) is a prodrug for the anticonvulsant and analgesic drug gabapentin.

IC50 Value:

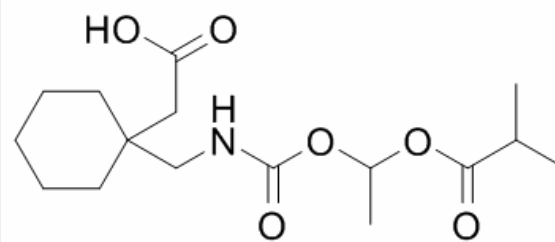
Target: Calcium Channel

Gabapentin enacarbil is an actively transported prodrug of gabapentin that provides sustained dose-proportional exposure to gabapentin and predictable bioavailability.

in vitro: The prodrug (XP-13512) demonstrated active apical to basolateral transport across Caco-2 cell monolayers and pH-dependent passive permeability across artificial membranes. XP13512 inhibited uptake of (14)C-lactate by human embryonic kidney cells expressing monocarboxylate transporter type-1, and direct uptake of prodrug by these cells was confirmed using liquid chromatography-tandem mass spectrometry. XP13512 inhibited uptake of (3)H-biotin into Chinese hamster ovary cells overexpressing human sodium-dependent multivitamin transporter (SMVT) [1].

in vivo: In 4 studies of healthy volunteers (136 subjects total), the pharmacokinetics of XP13512 immediate- and extended-release formulations were compared with those of oral gabapentin. XP13512 immediate-release (up to 2800 mg single dose and 2100 mg twice daily) was well absorbed (>68%, based on urinary recovery of gabapentin), converted rapidly to gabapentin, and provided dose-proportional exposure, whereas absorption of oral gabapentin declined with increasing doses to

Toxicity: Gabapentin's most common side effects in adult patients include dizziness, fatigue, weight gain, drowsiness, and peripheral edema (swelling of extremities).



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