

# Saxagliptin (hydrate)

Catalog No: tcsc3250



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

945667-22-1

**Formula:**

$C_{18}H_{27}N_3O_3$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Dipeptidyl Peptidase

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

BMS-477118 hydrate

**Observed Molecular Weight:**

333.43

## Product Description

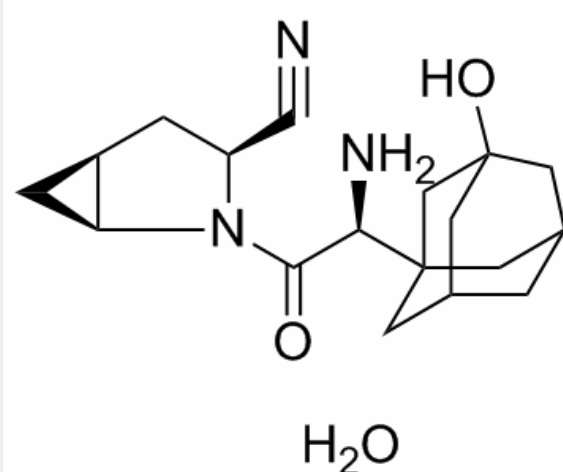
Saxagliptin H<sub>2</sub>O(BMS477118 H<sub>2</sub>O) is a selective and reversible DPP4 inhibitor with IC<sub>50</sub> of 26 nM and K<sub>i</sub> of 1.3 nM.

IC<sub>50</sub> value: 26 nM [1]

Target: DPP4

in vitro: Saxagliptin has an inhibition constant K<sub>i</sub> of 1.3 nM for DPP4 inhibition, which is 10-fold more potent than either vildagliptin or sitagliptin (another two DPP4 inhibitors) with K<sub>i</sub> of 13 and 18 nM. In addition, Saxagliptin demonstrates greater specificity for DPP4 than for either the DPP8 or DPP9 enzymes (400- and 75- fold, respectively). The active metabolite of saxagliptin is two-fold less potent than the parent. Both Saxagliptin and its metabolite are highly selective (>4000-fold) for the prevention of DPP4 compared with a range of other proteases (selectivity of sitagliptin and vildagliptin for DPP4 is >2600 and

in vivo: Saxagliptin is highly effective at eliciting marked dose-dependent enhancements in glucose clearance in the dose range 0.13-1.3 mg/kg in ob/ob mice relative to controls. Saxagliptin dose-dependently elevate plasma insulin significantly at 15 min post-oGTT, with concomitant improvement in the glucose clearance curves at 60 min post-oGTT [4].



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