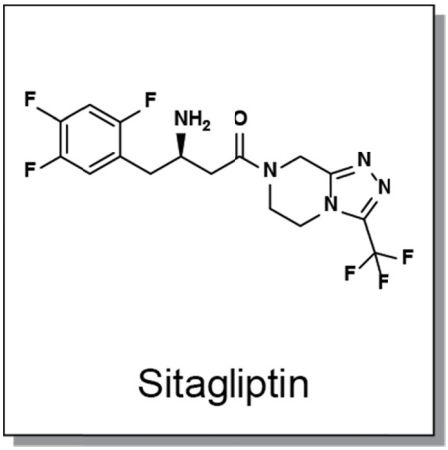
Product Specification Sheet

Product Name: Sitagliptin (Januvia)

Catalog Number: C7482-5 (powder)
C7482-5s (10mM in DMSO)

Package Size: 5 mg



Sitagliptin

Technical information:

Chemical Formula:	$C_{16}H_{15}F_6N_5O$
CAS #:	486460-32-6
Molecular Weight:	407.31
Purity:	>98%
Formulation:	White solide
Solubility:	Soluble in DMSO up to 100 mM
Chemical Name:	(3R)-3-Amino-1-[3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,2,4-triazolo[4,3-a]pyrazin-7-yl]-4-(2,4,5-trifluorophenyl)butan-1-one
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Handling:

- For C7482-5 (powder), add 1.228 mL of DMSO to make 10 mM solution.
- For C7482-5s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.

Biological Activity: Sitagliptin (also named MK-0431 and marketed as Januvia) is a competitive inhibitor of the enzyme dipeptidyl peptidase 4 (DPP-4). Sitagliptin can increase incretin levels (GLP-1 and GIP), which inhibit glucagon release, which in turn increases insulin secretion, decreases gastric emptying, and decreases blood glucose levels.

Reference:

1. Herman GA, et al.Pharmacokinetics and pharmacodynamics of sitagliptin, an inhibitor of dipeptidyl peptidase IV, in healthy subjects: results from two randomized, double-blind, placebo-controlled studies with single oral doses. Clin Pharmacol Ther 2005; 78 (6): 675–88.
2. Herman GA, et al. Pharmacokinetics and pharmacodynamic effects of the oral DPP-4 inhibitor sitagliptin in middle-aged obese subjects. J Clin Pharmacol 2006;46 (8): 876–86.
3. Lee B, et al. Pharmacokinetic, pharmacodynamic, and efficacy profiles of alogliptin, a novel inhibitor of dipeptidyl peptidase-4, in rats, dogs, and monkeys. Eur J Pharmacol. 2008;589(1-3):306-14

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