

Product Name: MK 0677

Catalog No.: 5272

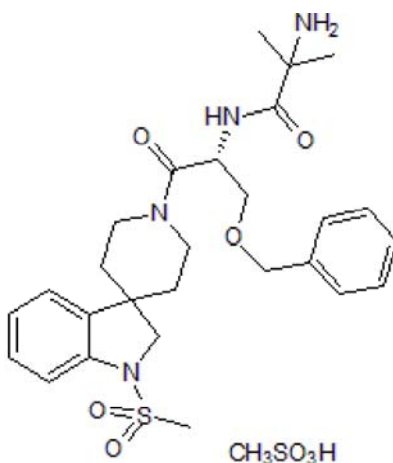
Batch No.: 3

CAS Number: 159752-10-0

IUPAC Name: 2-Amino-*N*-[(1*R*)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3*H*-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methylpropanamide methanesulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₇H₃₆N₄O₅S·CH₃SO₃H·1¼H₂O
Batch Molecular Weight: 647.29
Physical Appearance: White solid
Solubility: water to 50 mM
DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity
Chiral HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	51.96	6.62	8.66
Found	51.64	6.53	8.58

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: MK 0677

Catalog No.: 5272

Batch No.: 3

CAS Number: 159752-10-0

IUPAC Name: 2-Amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methylpropanamide methanesulfonate

Description:

MK 0677 is a high affinity ghrelin receptor agonist ($pK_i = 8.14$). Growth hormone (GH) secretagog; stimulates GH release from rat pituitary cells in vitro ($EC_{50} = 1.3 \text{ nM}$) and enhances GH plasma levels in vivo. Also attenuates isoproterenol-induced lipolysis in rat adipocytes in vitro. Orally bioavailable.

Physical and Chemical Properties:

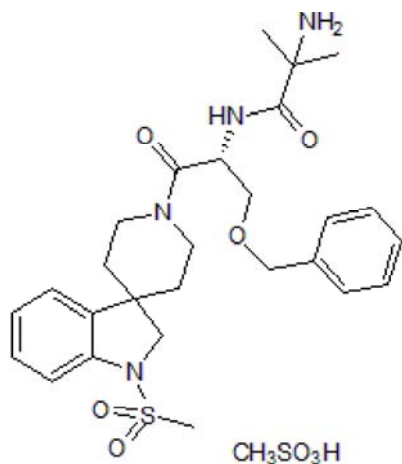
Batch Molecular Formula: $C_{27}H_{36}N_4O_5S \cdot CH_3SO_3H \cdot 1\frac{1}{4}H_2O$

Batch Molecular Weight: 647.29

Physical Appearance: White solid

Minimum Purity: $\geq 98\%$

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 50 mM
DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a $45\text{-}60^\circ\text{C}$ water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Bennett *et al* (2009) GH secretagogues and GH releasing peptides act as orthosteric super-agonists but not allosteric regulators for activation of the G protein Galpha(o1) by the Ghrelin receptor. *Mol.Pharmacol.* **76** 802. PMID: 19625579.

Mucciolo *et al* (2004) Ghrelin and des-acyl ghrelin both inhibit isoproterenol-induced lipolysis in rat adipocytes via a non-type 1a GH secretagogue receptor. *Eur.J.Pharmacol.* **498** 27. PMID: 15363972.

Patchett *et al* (1995) Design and biological activities of L-163,191 (MK-0677): a potent, orally active GH secretagogue. *Proc.Natl.Acad.Sci.U.S.A.* **92** 7001. PMID: 7624358.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel:+1 612 379 2956