

Product Name: GW 4869

Catalog No.: 6741

Batch No.: 1

IUPAC Name: 3,3'-(1,4-Phenylene)bis[N-[4-(4,5-dihydro-1H-imidazol-2-yl)phenyl]-2-propenamide] ditrifluoroacetate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₀H₂₈N₆O₂·2CF₃COOH·1½H₂O

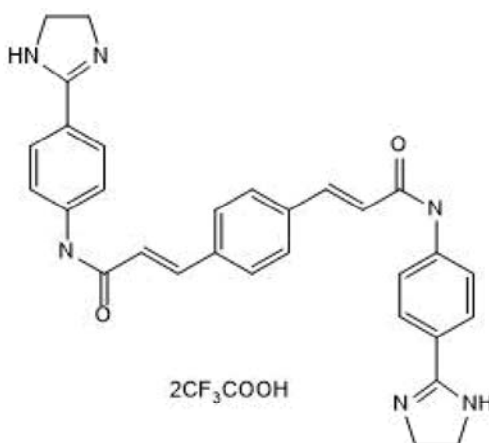
Batch Molecular Weight: 759.66

Physical Appearance: Yellow solid

Solubility: DMSO to 2 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 93.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	53.76	4.38	11.06
Found	53.41	4.44	10.91

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

Product Name: GW 4869

Catalog No.: 6741

Batch No.: 1

IUPAC Name: 3,3'-(1,4-Phenylene)bis[N-[4-(4,5-dihydro-1H-imidazol-2-yl)phenyl]-2-propenamido] ditrifluoroacetate

Description:

GW 4869 is a selective neutral sphingomyelin phosphodiesterase (N-SMase) inhibitor ($IC_{50} = 1 \mu M$). Exhibits selectivity for neutral sphingomyelinase over acid sphingomyelinase (a-SMase) at concentrations up to $150 \mu M$ as well as B. cereus PC-PLC, human lyso-PAF PLC, and bovine PP2A at $10 \mu M$. Blocks exosome biogenesis. Inhibits TNF- α -induced sphingomyelin hydrolysis and TNF- α -induced cell death in MCF-7 cells. Reverses hypoxia-induced pulmonary vasoconstriction in rats. Neuroprotective.

Physical and Chemical Properties:

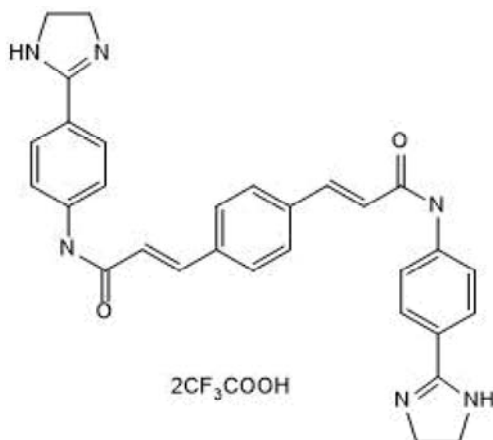
Batch Molecular Formula: $C_{30}H_{28}N_6O_2 \cdot 2CF_3COOH \cdot 1\frac{1}{2}H_2O$

Batch Molecular Weight: 759.66

Physical Appearance: Yellow solid

Minimum Purity: $\geq 90\%$

Batch Molecular Structure:



Storage: Store at $-20^{\circ}C$

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 2 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 $45-60^{\circ}C$ 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 $-20^{\circ}C$ or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Lallemand et al (2018) NSMase2 (type 2-neutral sphingomyelinase) deficiency or inhibition by GW4869 reduces inflammation and atherosclerosis in apoe $-/-$ mice. *Arterioscler.Thromb.Vasc.Biol.* **38** 1479. PMID: 29794115.

Essandoh et al (2015) Blockade of exosome generation with GW4869 dampens the sepsis-induced inflammation and cardiac dysfunction. *Biochim.Biophys.Acta* **1852** 2362. PMID: 26300484.

Figuera-Losada et al (2015) Gambinol, a novel inhibitor of neutral sphingomyelinase 2 shows neuroprotective properties. *PLoS One* **10** e0124481. PMID: 26010541.

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