

Certificate of Analysis

Print Date: Feb 18th 2019

www.tocris.com

Product Name: FM19G11 Catalog No.: 6653 Batch No.: 1

CAS Number: 329932-55-0

IUPAC Name: 2-Oxo-2-(p-tolyl)ethyl 3-(2,4-dinitrobenzamido)benzoate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{23}H_{17}N_3O_8.^{1/4}H_2O$

Batch Molecular Weight: 467.9

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 59.04 3.77 8.98 Found 58.78 3.64 9.1

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



Product Information

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Description:

Hypoxia inducible factor (HIF) α -subunit inhibitor (IC $_{50}$ = 80 nM in hypoxia induced luciferase assay). Inhibits transcriptional activity of HIF α isoforms. Directly regulates expression and inhibits transcriptional activity of pluripotency markers (Sox2 and Oct4) in rodent and human stem cells under hypoxic conditions, driving differentiation. Improves locomotion after severe spinal cord injury in mice, alone or in combination with transplantation of ependymal stem cells of the spinal cord. Also inhibits O 6 -methylguanine DNA methyltransferase (MGMT) via HIF1 α pathway, under normal and hypoxic conditions in glioblastoma cell line... Please see product datasheet on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₃H₁₇N₃O₈.½H₂O

Batch Molecular Weight: 467.9 Physical Appearance: Off White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

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 45-60°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:

Alastrue-Agudo et al (2018) FM19G11 and ependymal progenitor/stem cell combinatory treatment enhances neuronal preservation and oligodendrogenesis after severe spinal cord injury. Int.J.Mol.Sci. 19 E200. PMID: 29315225.

You et al (2018) FM19G11 inhibits O⁶-methylguanine DNA-methyltransferase expression under both hypoxic and normoxic conditions. Cancer Med. PMID: 29761922.

Moreno-Manzano *et al* (2010) FM19G11, a new hypoxia-inducible factor (HIF) modulator, affects stem cell differentiation status. J.Biol.Chem. **285** 1333. PMID: 19897487.

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