

Certificate of Analysis

Print Date: Aug 23rd 2022

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Product Name: AGN 193109 Catalog No.: 5758 Batch No.: 10

CAS Number: 171746-21-7

IUPAC Name: 4-[2-[5,6-Dihydro-5,5-dimethyl-8-(4-methylphenyl)-2-naphthalenyl]ethynyl]benzoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{28}H_{24}O_2$ Batch Molecular Weight:392.49Physical Appearance:White solid

Solubility: DMSO to 10 mM with gentle warming

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 85.68 6.16 Found 85.46 6.17

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Product Information

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Description:

AGN 193109 is a high affinity pan-retinoic acid receptor (RAR) antagonist (K_d values are 2, 2 and 3 nM at RAR α , RAR β and RAR γ , respectively). Exhibits no significant affinity for retinoic X receptors. AGN 193109 promotes the differentiation from mouse embryonic stem cells into paraxial mesoderm. AGN 193109 suppresses primary human cardiovascular smooth muscle cell calcification. AGN 193109 synthesized to Ancillary Material Grade also available.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₈H₂₄O₂ Batch Molecular Weight: 392.49 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

CO₂H

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 10 mM with gentle warming

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:

Rogers et al (2020) Retinoids repress human cardiovascular cell calcification with evidence for distinct selective retinoid modulator effects. Arterioscler. Thromb. Vasc. Biol. 40 656. PMID: 31852220.

Russell et al (2018) Inverse agonism of retinoic acid receptors directs epiblast cells into the paraxial mesoderm lineage. Stem Cell Res. 30 85. PMID: 29807258.

Jaurena et al (2015) Zic1 controls placode progenitor formation non-cell autonomously by regulating retinoic acid production and transport. Nat.Commun. 6 7476. PMID: 26101153.

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