

Certificate of Analysis

Print Date: Apr 1st 2022

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Product Name: AMG 9810 Catalog No.: 2316 Batch No.: 3

CAS Number: 545395-94-6

IUPAC Name: (2E)-N-(2,3-Dihydro-1,4-benzodioxin-6-yl)-3-[4-(1,1-dimethylethyl)phenyl]-2-propenamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{23}NO_3$.Batch Molecular Weight:337.42Physical Appearance:Beige solid

Solubility: DMSO to 50 mM

ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 74.75 6.87 4.15 Found 74.61 6.98 4.13

5 529449 www.tocris.com/distributors Tel:+1 612 379 2956



Product Information

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Description:

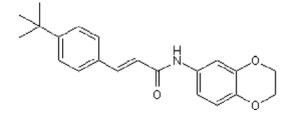
AMG 9810 is a potent and selective, competitive vanilloid TRPV1 receptor antagonist ($IC_{50} = 17$ nM). Inhibits capsaicin-, proton-, heat- and endogenous ligand-induced activation of human and rat recombinant TRPV1 receptors. Displays antihyperalgesic properties in a rat model of inflammatory pain.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{21}H_{23}NO_3$. Batch Molecular Weight: 337.42 Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 50 mM ethanol 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:

Mouchbahani-Constance *et al* (2018) Lionfish venom elicits pain predominantly through the activation of nonpeptidergic nociceptors. Pain. *159* 2255. PMID: 29965829.

Doherty et al (2005) Discovery of potent, orally available vanilloid receptor-1 antagonists. Structure-activity relationship of *N*-aryl cinnamides. J.Med.Chem. **48** 71. PMID: 15634002.

Gavva et al (2005) AMG 9810 [(*E*)-3-(4-*t*-Butylphenyl)-*N*-(2,3-dihydrobenzo[*b*][1,4]dioxin-6-yl)acrylamide], a novel vanilloid receptor 1 (TRPV1) antagonist with antihyperalgesic properties. J.Pharmacol.Exp.Ther. **313** 474. PMID: 15615864.

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