PRODUCT INFORMATION

AMG 9810
Item No. 14715

CAS Registry No.: 545395-94-6
Formal Name: (2E)-N-(2,3-dihydro-1,4-benzodioxin-6-yl)-3-[4-(1,1-dimethylethyl)phenyl]-2-propenamide
MF: C_{21}H_{23}NO_{3}
FW: 337.4
Purity: ≥98%
UV/Vis.: λ_{max} 304 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

AMG 9810 is supplied as a crystalline solid. A stock solution may be made by dissolving the AMG 9810 in the solvent of choice. AMG 9810 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of AMG 9810 in ethanol is approximately 10 mg/ml and approximately 16 mg/ml in DMSO and DMF.

AMG 9810 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

AMG 9810 is a competitive antagonist of capsaicin activation of the vanilloid receptor 1 (TRPV1) (IC_{50}s = 24.5 and 85.6 nM for human and rat, respectively). Additionally, it has been shown to compete with other modes of TRPV1 activation, including protons (IC_{50}s = 92.7 and 294 nM for human and rat, respectively), heat (IC_{50}s = 15.8 and 21 nM for human and rat, respectively), and the endogenous ligands: anandamide, N-arachidonyl dopamine (IC_{50} = 8.5 and 260 nM for human and rat, respectively), and oleoyldopamine. In a rat model of inflammatory pain induced by intraplantar injection of complete Freund’s adjuvant, 30-100 mg/kg AMG 9810 reverses thermal and mechanical hyperalgesia.

Reference