

Certificate of Analysis

Print Date: Jul 28th 2022

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Product Name: AM 6545 Catalog No.: 5443 Batch No.: 4

CAS Number: 1245626-05-4

IUPAC Name: 5-[4-(4-Cyano-1-butyn-1-yl)phenyl]-1-(2,4-dichlorophenyl)-*N*-(1,1-dioxido-4-thiomorpholinyl)-4-methyl-1*H*-pyrazole-

3-carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{26}H_{23}Cl_2N_5O_3S.\frac{1}{4}H_2O$

Batch Molecular Weight: 560.96

Physical Appearance: Off-white solid

Solubility: DMSO to 20 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.3% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.67 4.22 12.48 Found 55.5 3.9 12.5

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



Product Information

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3-carboxamide

Description:

AM 6545 is a high affinity and selective CB_1 antagonist ($K_i = 3.3$ nM). Exhibits >100-fold selectivity for CB_1 over CB_2 receptors. Improves glucose homeostasis, reverses hepatic steatosis and reduces body weight in diet-induced obese mice. Orally available and non-brain penetrant.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₆H₂₃Cl₂N₅O₃S.1/₄H₂O

Batch Molecular Weight: 560.96 Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 20 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:

Bowles *et al* (2015) A peripheral endocannabinoid mechanism contributes to glucocorticoid-mediated metabolic syndrome. Proc.Natl.Acad.Sci.U.S.A. *112* 285. PMID: 25535367.

Tam *et al* (2010) Peripheral CB₁ cannabinoid receptor blockade improves cardiometabolic risk in mouse models of obesity. J.Clin.Invest. **120** 2953. PMID: 20664173.

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