



Certificate of Analysis

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Product Name: MRTX 849 Catalog No.: 7488 Batch No.: 1

CAS Number: 2326521-71-3

IUPAC Name: 4-[7-(8-Chloro-1-naphthalenyl)-5,6,7,8-tetrahydro-2-[[(2S)-1-methyl-2-pyrrolidinyl]methoxy]pyrido[3,4-d]pyrimidin-4-

yl]-1-(2-fluoro-1-oxo-2-propen-1-yl)-(2S)-2-piperazineacetonitrile

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₂H₃₅ClFN₇O₂.½H₂O

Batch Molecular Weight: 608.63

Physical Appearance: Cream solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.15 5.88 16.11 Found 62.83 5.88 15.95

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

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Product Information

Print Date: Jan 20th 2023

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Description:

MRTX 849 is a mutant-selective inhibitor of KRAS $^{\rm G12C}$ (IC $_{50}$ = 142 nM). MRTX 849 covalently binds to KRAS $^{\rm G12C}$ at the cysteine 12 residue and inhibits KRAS-dependent signal transduction by locking the protein in its inactive GDP-bound state. MRTX 849 induces pronounced tumor regression in 17 of 26 (65%) KRAS $^{\rm G12C}$ -positive cell lines and patient-derived xenograft models from multiple tumor types. It is orally bioavailable.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₂H₃₅CIFN₇O₂.1/4H₂O

Batch Molecular Weight: 608.63 Physical Appearance: Cream solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 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:

FeII et al (2020) Identification of the clinical development candidate MRTX849, a covalent KRASG12C inhibitor for the treatment of cancer. J.Med.Chem. 63 6679. PMID: 32250617.

Hallin et al (2020) The KRAS G12C inhibitor MRTX849 provides insight toward therapeutic susceptibility of KRAS-mutant cancers in mouse models and patients. Cancer Discov. 10 54. PMID: 31658955.

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