



# **Certificate of Analysis**

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Product Name: GSK 1838705 Catalog No.: 5111 Batch No.: 1

CAS Number: 1116235-97-2

IUPAC Name: 2-[[2-[[1-[(Dimethylamino)ethanoyl]-5-(methyloxy)-2,3-dihydro-1*H*-indol-6-yl]amino]-7*H*-pyrrolo[2,3-d]pyrimidin-4-yl]

amino]-6-fluoro-N-methylbenzamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{27}H_{29}FN_8O_3.1\frac{1}{2}H_2O$ 

**Batch Molecular Weight:** 559.59 **Physical Appearance:** Beige solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.95 5.76 20.02 Found 57.8 5.63 19.94



# **Product Information**

Print Date: Jan 29th 2015

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amino]-6-fluoro-N-methylbenzamide

#### **Description:**

Potent insulin receptor (IR) and insulin-like growth factor-1 receptor (IGF1R) inhibitor (IC $_{50}$  values are 1.6 and 2 nM, respectively). Also inhibits anaplastic lymphoma kinase (ALK) (IC $_{50}$  = 0.5 nM). Displays > 800-fold selectivity for IR, IGFR1 and ALK over a panel of 44 kinases including JNK. Blocks proliferation of cancer cell lines in vitro, and causes complete regression of ALK-dependent tumors in vivo. Orally bioavailable.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>27</sub>H<sub>29</sub>FN<sub>8</sub>O<sub>3</sub>.1½H<sub>2</sub>O

Batch Molecular Weight: 559.59 Physical Appearance: Beige solid

**Minimum Purity:** >98%

## **Batch Molecular Structure:**

Storage: Store at -20°C

# Solubility & Usage Info:

DMSO 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:

**Sabbatini** et al (2009) GSK1838705A inhibits the insulin-like growth factor-1 receptor and anaplastic lymphoma kinase and shows antitumor activity in experimental models of human cancers. Mol.Cancer.Ther. **8** 2811. PMID: 19825801.

Chamberlain et al (2009) Optimization of 4,6-bis-anilino-1H-pyrrolo[2,3-d]pyrimidine IGF-1R tyrosine kinase inhibitors towards JNK selectivity. Bioorg.Med.Chem.Lett. 19 360. PMID: 19071018.

Gao et al (2014) Site-specific activation of AKT protects cells from death induced by glucose deprivation. Oncogene 33 745. PMID: 23396361.

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