

**Product Name:** Lapatinib

**Catalog No.:** 6811

**Batch No.:** 2

CAS Number: 231277-92-2

IUPAC Name: *N*-[3-Chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[5-[[[2-(methylsulfonyl)ethyl]amino]methyl]-2-furanyl]-4-quinazolinamine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>29</sub>H<sub>26</sub>ClFN<sub>4</sub>O<sub>4</sub>S·¼H<sub>2</sub>O

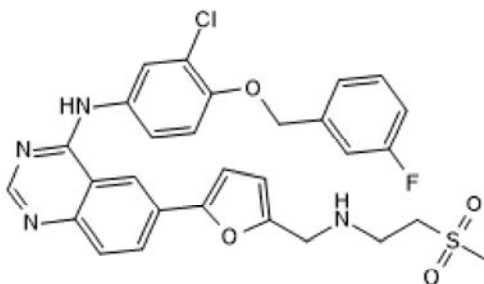
**Batch Molecular Weight:** 585.56

**Physical Appearance:** Yellow 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	59.48	4.56	9.57
Found	59.36	4.5	9.49

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

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**2**

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**Description:**

Lapatinib is a potent and selective dual ErbB2 (HER-2) and EGFR inhibitor (IC<sub>50</sub> values are 9.8 and 10.2 nM, respectively). Selective for EGFR and ErbB-2 versus other proliferative kinases. Inhibits proliferation in multiple cancer cell lines (average IC<sub>50</sub> values

**Physical and Chemical Properties:**

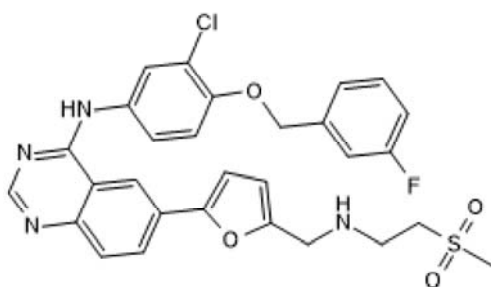
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Batch Molecular Weight: 585.56

Physical Appearance: Yellow 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:**

**Rusnak et al** (2001) The effects of the novel, reversible epidermal growth factor receptor/ErbB-2 tyrosine kinase inhibitor, GW2016, on the growth of human normal and tumor-derived cell lines *in vitro* and *in vivo*. *Mol.Cancer Ther.* **1** 85. PMID: 12467226.

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