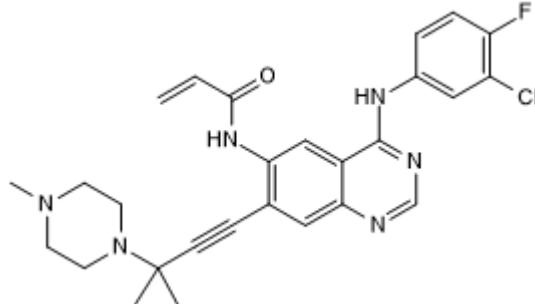


Certificate of Analysis**Product Name:** AV 412**Catalog No.:** 4397**Batch No.:** 1

CAS Number: 451492-95-8

IUPAC Name: *N*-[4-[(3-Chloro-4-fluorophenyl)amino]-7-[3-methyl-3-(4-methyl-1-piperazinyl)-1-butyn-1-yl]-6-quinazolinyl]-2-propanamide**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₂₇H₂₈ClFN₆O.H₂O**Batch Molecular Weight:** 525.02**Physical Appearance:** Yellow solid**Solubility:** DMSO to 100 mM
1eq. HCl to 20 mM
ethanol to 50 mM**Storage:** Store at -20°C**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.28 (Dichloromethane:Methanol:Ammonia soln. [9:1:0.1])**HPLC:** Shows >99.5% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 61.77 5.76 16.01

Found 61.92 5.69 16.18

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

Product Information

www.tocris.com
Product Name: AV 412

Catalog No.: 4397

Batch No.: 1

CAS Number: 451492-95-8

IUPAC Name: N-[4-[(3-Chloro-4-fluorophenyl)amino]-7-[3-methyl-3-(4-methyl-1-piperazinyl)-1-butyn-1-yl]-6-quinazolinyl]-2-propanamide

Description:

Potent inhibitor of EGFR, ErbB2 and Abl receptor tyrosine kinases (IC₅₀ values are 0.5-2, 19 and 41 nM, respectively). Also weak inhibitor of FLT1 and Src. Inhibits EGFR and ErbB2 autophosphorylation in vitro in NSCLC and T-47D breast cancer cell lines, respectively. Inhibits tumor growth of EGFR-overexpressing A431 and ErbB2 overexpressing BT-474 tumor xenografts in mice.

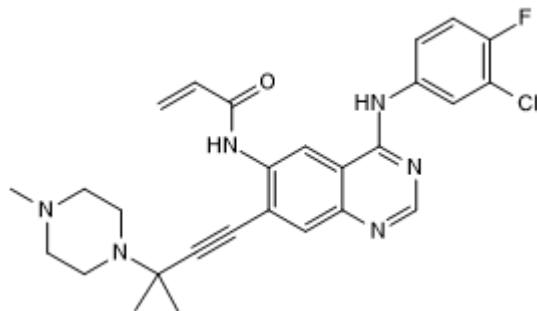
Physical and Chemical Properties:

 Batch Molecular Formula: C₂₇H₂₈ClFN₆O.H₂O

Batch Molecular Weight: 525.02

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

 DMSO to 100 mM
 1eq. HCl to 20 mM
 ethanol to 50 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:

Suzuki et al (2009) Antitumor activity of a dual epidermal growth factor receptor and ErbB2 kinase inhibitor MP-412 (AV-412) in mouse xenograft models. *Cancer Sci.* **100** 1526. PMID: 19459856 .

Suzuki et al (2007) Pharmacological characterization of MP-412 (AV-412), a dual epidermal growth factor receptor and ErbB2 tyrosine kinase inhibitor. *Cancer Sci.* **98** 1977. PMID: 17888033 .

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