**Proteins** 

# **EOC317**

Cat. No.: HY-16025

CAS No.: 939805-30-8

Molecular Formula:  $C_{27}H_{26}F_{5}N_{7}O_{3}$ Molecular Weight: 591.53

Target: FGFR; VEGFR

Pathway: Protein Tyrosine Kinase/RTK

-20°C Storage: Powder 3 years

> 4°C 2 years

In solvent -80°C 2 years

> -20°C 1 year

**Product** Data Sheet

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 35 mg/mL (59.17 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.6905 mL	8.4527 mL	16.9053 mL
	5 mM	0.3381 mL	1.6905 mL	3.3811 mL
	10 mM	0.1691 mL	0.8453 mL	1.6905 mL

Please refer to the solubility information to select the appropriate solvent.

### **BIOLOGICAL ACTIVITY**

Description EOC317 (ACTB-1003) is an oral kinase inhibitor with IC50s of 6, 2 and 4 nM for FGFR1, VEGFR2 and Tie-2.

IC<sub>50</sub> & Target FGFR1 VEGFR2 Tie-2

6 nM (IC<sub>50</sub>) 2 nM (IC<sub>50</sub>) 4 nM (IC<sub>50</sub>)

> EOC317 (ACTB-1003) is an oral kinase inhibitor with multiple modes of action, targeting cancer mutations via FGFR inhibition FGFR1 (IC<sub>50</sub>=6 nM), angiogenesis through inhibition of VEGFR2 (2 nM), Tie-2 (4 nM), and induces apoptosis likely by targeting RSK (5 nM) and p70S6K (32 nM). EOC317 is highly active with dose-dependent tumor growth inhibition in cell lines with FGFR genetic alterations-OPM2 human multiple myeloma and the murine leukemia Ba/F3-TEL-FGFR1. OPM2 cells harbor the FGFR3 t(4:14) translocation, FGFR3 K650E mutation and PTEN deletion while the Ba/F3-TEL-FGFR1 cells are

driven by FGFR1 over-expression<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo EOC317 (ACTB-1003) is shown to inhibit tumor angiogenesis evident by the inhibition of CD31 staining in tumor sections.

EOC317 is combinable with 5-FU or paclitaxel without diminishing the activity or increasing the toxicity of these

In Vitro

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **CUSTOMER VALIDATION**

• Science. 2017 Dec 1;358(6367):eaan4368.

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#### **REFERENCES**

[1]. Patel K, et al. ACTB-1003: An oral kinase inhibitor targeting cancer mutations (FGFR), angiogenesis (VEGFR2, TEK), and induction of apoptosis (RSK and p70S6K). Journal of Clinical Oncology 28, no. 15 DOI: 10.1200/jco.2010.28.15\_suppl.e13665

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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