**Data Sheet**

**Product Name:** ACTB–1003  
**Cat. No.:** HY-16025  
**CAS No.:** 939805-30-8  
**Molecular Formula:** C27H26F5N7O3  
**Molecular Weight:** 591.53  
**Target:** FGFR; VEGFR  
**Pathway:** Protein Tyrosine Kinase/RTK  
**Solubility:** DMSO: ≥ 35 mg/mL  

**BIOLOGICAL ACTIVITY:**

ACTB–1003 is an oral kinase inhibitor with IC\(_{50}\)s of 6, 2 and 4 nM for FGFR1, VEGFR2 and Tie–2.  
IC\(_{50}\) & Target: IC\(_{50}\): 6 nM (FGFR1), 2 nM (VEGFR2), 4 nM (Tie–2)[1]  
**In Vitro:** ACTB–1003 is an oral kinase inhibitor with multiple modes of action, targeting cancer mutations via FGFR inhibition FGFR1 (IC\(_{50}\)=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). ACTB–1003 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[1].  
**In Vivo:** ACTB–1003 is shown to inhibit tumor angiogenesis evident by the inhibition of CD31 staining in tumor sections. ACTB–1003 is combinable with 5–FU or paclitaxel without diminishing the activity or increasing the toxicity of these chemotherapy agents in the HCT–116 colon tumor xenograft model[1].  

**References:**


Caution: Product has not been fully validated for medical applications. For research use only.

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