**PRODUCT INFORMATION**

**WYE-687**

Item No. 29977

**CAS Registry No.:** 1062161-90-3  
**Formal Name:** N-[4-[4-(4-morpholinyl)-1-[1-(3-pyridinylmethyl)-4-piperidinyl]-1H-pyrazolo[3,4-d]pyrimidin-6-yl]phenyl]-carbamic acid, methyl ester  
**Synonym:** WAY-687  
**MF:** C$_{28}$H$_{32}$N$_8$O$_3$  
**FW:** 528.6  
**Purity:** ≥98%  
**UV/Vis.:** $\lambda_{max}$: 287 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

**Laboratory Procedures**

WYE-687 is supplied as a crystalline solid. A stock solution may be made by dissolving the WYE-687 in the solvent of choice, which should be purged with an inert gas. WYE-687 is soluble in the organic solvent DMSO.

**Description**

WYE-687 is an inhibitor of mammalian target of rapamycin (mTOR; IC$_{50}$ = 0.007 µM).\(^1\) It is selective for mTOR over PI3Kα and PI3Kγ (IC$_{50}$s = 0.81 and 3.11 µM, respectively), as well as a panel of 24 additional kinases (IC$_{50}$s = >50 µM for all). WYE-687 (0.2, 1, and 5 µM) decreases phosphorylation of the mTORC1 and mTORC2 substrates Akt and S6 kinase (S6K1) in a cell-free assay. It decreases proliferation of nine cancer cell lines, including breast, prostate, glioma, kidney, and colorectal cancer cells, with IC$_{50}$ values ranging from 0.18 to 1.25 µM. WYE-687 inhibits survival of HL-60 and U937 leukemia cells in a concentration-dependent manner and reduces tumor growth in a U937 mouse xenograft model when administered at doses of 5 and 25 mg/kg.\(^2\)

**References**