

PRODUCT: OTSSP167

ALTERNATE NAME: 4-[7-acetyl-8-[[4-[(dimethylamino)methyl]cyclohexyl]amino]-1H-1,5-naphthyridin-2-ylidene]-2,6-dichlorocyclohexa-2,5-dien-1-one; OTS167

CATALOG #: B1065-5, 25

AMOUNT: 5 mg, 25 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₅H₂₈Cl₂N₄O₂

MOLECULAR WEIGHT: 487.42

CAS NUMBER: 1431697-89-0

APPEARANCE: Off-white solid

SOLUBILITY: DMSO (>20 mg/ml)

PURITY: ≥98% by HPLC

STORAGE: Store at -20 °C. Protect from moisture

DESCRIPTION: OTSSP167 is an inhibitor (IC₅₀ = 0.41 nM) of maternal embryonic leucine zipper kinase (MELK) with potential antineoplastic activity. OTSSP167 binds to MELK, which prevents both MELK phosphorylation and activation, thus inhibiting the phosphorylation of downstream MELK substrates. This may lead to an inhibition of both cell proliferation and survival in MELK-expressing tumor cells. MELK, a serine/threonine kinase, is involved in cancer cell survival, invasiveness and cancer-stem cell formation and maintenance; it is highly upregulated in various types of cancer cells and absent in normal, healthy cells.

REFERENCE: Chung, S., *et al.* (2012). *Oncotarget* **3**, 1629-1640.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

Colchicine (Cat. No. 1519-1000)
Combretastatin A (Cat. No. 2239-10, 50)
Docetaxel (Cat. No. 2232-10, 50)
Epothilone B (Cat. No. 2012-1,5)
Etoposide (Cat. No. 1043-25Mg, 25MG)
Etoposide phosphate (Cat. No. 2896-10,50)
Nocodazole (Cat. No. 2185-10, 50)
Paclitaxel (Cat. No. 1567-25)
Podophyllotoxin (Cat. No. 2767-50)
Pseudolaric acid B (Cat. No. 2512-1, 5)
Tamoxifen Citrate (Cat. No. 1551-1000)
Vinblastin sulfate (Cat. No. 1959-5, 25)
Vinorelbine tartrate (Cat. No. 1957-5, 25)
A771726 (Cat. No. 1973-5, 25)
Ascomycin (Cat. No. 1570-2)
Cyclosporin A (Cat. No. 1522-100, 1G)
(R,S)-Lenalidomide (Cat. No. 1862-25, 100)
FK506 (Cat. No. 1563-1,10)
Leflunomide (Cat. No. 1972-10, 50)
Mycophenolic acid (Cat. No. 1882-50, 250)
Rapamycin (Cat. No. 1568-5, 50)

USAGE: **FOR RESEARCH USE ONLY! Not to be used in humans**