# PRODUCT INFORMATION

## UMK57

*Item No. 46848*

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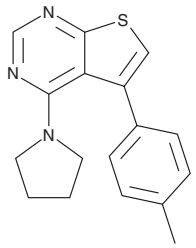
| **CAS Registry No.:** | 342595-74-8 |
| **Formal Name:** | 5-(4-methylphenyl)-4-(1-pyrrolidinyl)-thieno[2,3-d]pyrimidine |
| **MF:** | $C_{17}H_{17}N_3S$ |
| **FW:** | 295.4 |
| **Purity:** | ≥98% |
| **Supplied as:** | A solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |




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

### Laboratory Procedures

UMK57 is supplied as a solid. A stock solution may be made by dissolving the UMK57 in the solvent of choice, which should be purged with an inert gas. UMK57 is sparingly soluble (1-10 mg/ml) in acetonitrile.

### Description

UMK57 is a potentiator of mitotic centromere-associated kinesin (MCAK).[1] It enhances MCAK-dependent microtubule depolymerization at 10 µM. UMK57 (100 nM) transiently suppresses chromosome missegregation during mitosis in U2OS osteosarcoma cells, which display chromosomal instability, but this effect is reduced over time in an Aurora B-dependent manner. It also reduces age-related mild chromosomal instability and delays cellular senescence in mitotic human dermal fibroblasts (HDFs) isolated from an octogenarian donor when used at a concentration of 1 µM.[2]

### References


1. Orr, B., Talje, L., Liu, Z., *et al.* Adaptive resistance to an inhibitor of chromosomal instability in human cancer cells. *Cell Rep.* **17(7)**, 1755-1763 (2016).
2. Barroso-Vilares, M., Macedo, J.C., Reis, M., *et al.* Small-molecule inhibition of aging-associated chromosomal instability delays cellular senescence. *EMBO Rep.* **21(5)**, e49248 (2020).



**WARNING**
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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