

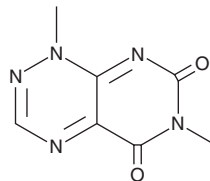
PRODUCT INFORMATION



PKF118-310

Item No. 22440

CAS Registry No.: 84-82-2
Formal Name: 1,6-dimethyl-pyrimido[5,4-e]-1,2,4-triazine-5,7(1H,6H)-dione
Synonyms: NSC 67078, Toxoflavin
MF: C₇H₇N₅O₂
FW: 193.2
Purity: ≥98%
UV/Vis.: λ_{max}: 259, 396 nm
Supplied as: A crystalline 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

PKF118-310 is supplied as a crystalline solid. A stock solution may be made by dissolving the PKF118-310 in water. The solubility of PKF118-310 in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PKF118-310 is an inhibitor of the protein-protein interaction between T cell factor 4 (Tcf4) and β-catenin that is produced by *Actinomyces* strains.¹ It disrupts binding of β-catenin to a GST-Tcf4 fusion protein in HCT116 cell lysates (IC₅₀ = 0.8 μM). PKF118-310 blocks appearance of the Tcf4 and β-catenin complex bound to DNA in an EMSA assay. It reduces levels of the β-catenin regulated proteins c-Myc and cyclin D1 but has no effect on cyclin E in HCT116 cells. PKF118-310 (0.5 pmol) abrogates β-catenin, but not siamois, ventral body axis duplication induced by mRNA in *Xenopus* embryos. It reduces growth of HCT116, HT-29, PC3, and DU145 cancer cells *in vitro* (IC₅₀s = 170-300 nM). PKF118-310 (1 mg/kg twice per week) reduces tumor growth and expression of c-Myc, cyclin D1, and Survivin in a HepG2 mouse xenograft model.²

References

1. Lepourcelet, M., Chen, Y.N., France, D.S., *et al.* Small-molecule antagonists of the oncogenic Tcf/β-catenin protein complex. *Cancer Cell* **5**(1), 91-102 (2004).
2. Wei, W., Chua, M.-S., Grepper, S., *et al.* Small molecule antagonists of the Tcf4/β-catenin complex inhibit the growth of HCC cells *in vitro* and *in vivo*. *Int. J. Cancer* **126**(10), 2426-2436 (2010).

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.

WARRANTY AND LIMITATION OF REMEDY

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