

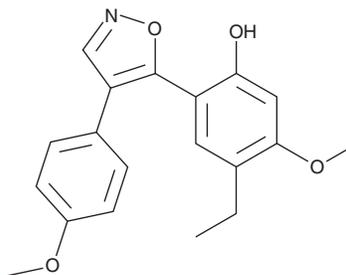
# PRODUCT INFORMATION



## KRIBB3

Item No. 23973

**CAS Registry No.:** 129414-88-6  
**Formal Name:** 4-ethyl-5-methoxy-2-[4-(4-methoxyphenyl)-5-isoxazolyl]-phenol  
**MF:** C<sub>19</sub>H<sub>19</sub>NO<sub>4</sub>  
**FW:** 325.4  
**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

KRIBB3 is supplied as a solid. A stock solution may be made by dissolving the KRIBB3 in the solvent of choice. KRIBB3 is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 25 mM.

### Description

KRIBB3 is an Hsp27 and microtubule inhibitor that inhibits migration and invasion of MDA-MB-231 cells *in vitro* in an Hsp27-dependent manner.<sup>1,2</sup> It inhibits protein kinase C (PKC) phosphorylation of Hsp27 but not phospholipase C $\beta$ 3, indicating KRIBB3 interaction with Hsp27 is preventing its phosphorylation. KRIBB3 (1-100  $\mu$ M) inhibits growth of HCT116, HCT15, and MDA-MB-231 cells in an Hsp27-independent and concentration-dependent manner. It induces HCT116 cell cycle arrest in the G<sub>2</sub>/M phase *via* formation of the Mad2/p55CDC inhibitory complex and Bax activation of apoptosis.<sup>2</sup> KRIBB3 also inhibits microtubule polymerization in HCT116 cells. *In vivo*, KRIBB3 (50-100 mg/kg) reduces tumor volume in an HCT116 mouse xenograft model.

### References

1. Shin, K.D., Lee, M.-Y., Shin, D.-S., *et al.* Blocking tumor cell migration and invasion with biphenyl isoxazole derivative KRIBB3, a synthetic molecule that inhibits Hsp27 phosphorylation. *J. Biol. Chem.* **280**(50), 41439-41448 (2005).
2. Shin, K.D., Yoon, Y.J., Kang, Y.-R., *et al.* KRIBB3, a novel microtubule inhibitor, induces mitotic arrest and apoptosis in human cancer cells. *Biochem. Pharmacol.* **75**(2), 383-394 (2008).

#### 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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