

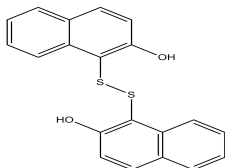
## Product: IPA-3

ALTERNATE NAME: 1,1'-dithiobis-2-naphthalenol

CATALOG #: 2647-5, 25

AMOUNT: 5 mg, 25 mg

STRUCTURE:



MOLECULAR FORMULA:  $C_{20}H_{14}O_2S_2$

MOLECULAR WEIGHT: 350.45

CAS NUMBER: 42521-82-4

APPEARANCE: Yellow solid

SOLUBILITY: DMSO (~25 mg/ml)

PURITY:  $\geq 95\%$

STORAGE: Store at  $-20\text{ }^{\circ}\text{C}$ . Protect from air and light

**DESCRIPTION:** IPA-3 is a cell-permeable allosteric inhibitor of PAK1 (the p21-activated kinase 1) that is non-competitive with respect to ATP binding ( $IC_{50} = 2.5\text{ }\mu\text{M}$ ). It does not, however, inhibit the activity of PAK1 that has been pre-activated with Cdc42. IPA-3 binds covalently to the PAK1 regulatory domain (apparent  $K_d = 1.9\text{ }\mu\text{M}$ ) and prevents binding to the upstream activator Cdc42. Potential anti-tumor agent. Since Pak1 is also implicated as a critical downstream effector of protein kinase C, IPA-3 may prevent differentiation in some tissue development.

**REFERENCE:** Deacon, S.W., *et al.* (2008). *Chem. Biol.* **15**, 322-331.

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

### RELATED PRODUCTS:

LIMK1 Antibody (Cat. No. 3433-100)

LIMK2 Antibody (Cat. No. 3584-100)

PAK1 Antibody (Cat. No. 3908-100)

PAK1 Antibody (Cat. No. 3248-100)

**FOR RESEARCH USE ONLY! Not to be used on humans.**