Cat No. 51-N19

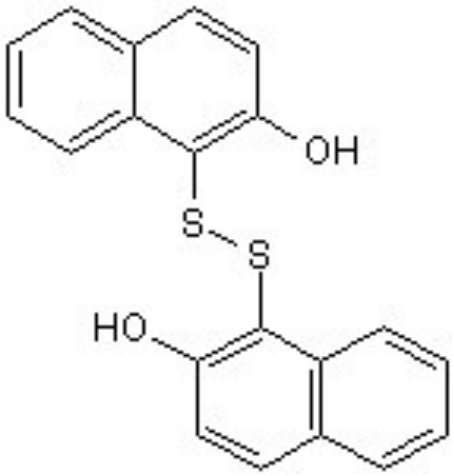
IPA3

5mg

For research purposes only

IPA3 is a selective inhibitor of P21-activated kinase (PAK1). It functions by targeting the autoregulatroy mechanism, inhibiting the activators from binding to the active sites on the enzyme, producing the inactive conformation of PAKs. The autoinhibitory regions suppress the catalytic activity of its kinase domain, which are removed once activators have bound to the protein. IPA2 does not inhibit PAK1 if activators are already bound to the enzyme. PAK1 is implicated in tumorigenisis and metastasis.

TECHNICAL INFORMATION



Other Names: 1,1'-Disulfanediyldinaphthalen-2-01

Chemical Formula: $C_{20}H_{14}O_2S_2$

CAS Number: 42521-82-4

PubChem Substance ID: 521106

Molecular Weight: 350.45

Purity: >97%

Appearance: Off White-Yellow Powder

Solubility: DMSO

IC_{50} : PAK1 2.5µM

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in ≥75mM of DMSO.

REFERENCES

1. Singhal, R., et al (2012). The response to PAK1 inhibitor IPA3 distinguishes between cancer cells with mutations in VRAF and Ras oncogenes. Oncotarget. 3:700-8.
2. Wang, Z., et al (2011). Inhibition or ablation of P21-activated kinase (PAK1) disrupts glucose homeostatic mechanisms in vivo. J Biol Chem. 286:41359-67.
3. Hoover, W.C., et al (2012). Inhibition of P21 activated kinase (PAK) reduces airway responsiveness in vivo and in vitro in murine and human airways. PLos One. 7:e42601.