



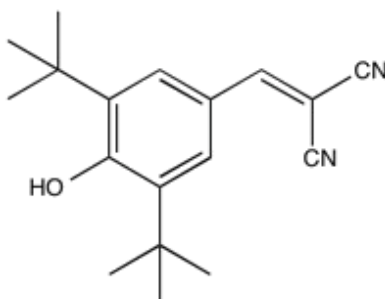
## Catalog # 10-1535

### Tyrphostin 9

10537-47-0

3,5-Di-tert-butyl-4-hydroxybenzylidene-malononitrile  
Tyrphostin a9, Malonoben, AG-17, SF 6847, RG-50872

Lot # X105444



Inhibits PDGF receptor tyrosine kinase ( $IC_{50} = 1.2 \mu M$ )<sup>1</sup> and is a potent (10 nM) inhibitor of oxidative phosphorylation<sup>2</sup>. Inhibits cell growth by disrupting mitochondria<sup>3</sup>. Perturbs the golgi complex and blocks proliferation of vascular smooth muscle cells<sup>4</sup>.

- 1) Bilder *et al.* (1991), *Tyrphostins inhibit PDGF-induced DNA synthesis and associated early events in smooth muscle cells*; Am. J. Physiol., **260** C721
- 2) Terada *et al.* (1981), *The interaction of highly active uncouplers with mitochondria*; Biochim. Biophys. Acta , **639** 225
- 3) Burger *et al.* (1995), *Tyrphostin AG17, [3,5-Ditert-butyl-4-hydroxybenzylidene)-malononitrile], inhibits cell growth by disrupting mitochondria*; Cancer Res., **55** 2794
- 4) Thyberg *et al.* (1998), *tyrphostin A9 and wortmannin perturb the Golgi complex and block proliferation of vascular smooth muscle cells*; Eur. J. Cell Biol., **76** 33

### PHYSICAL DATA

Molecular Weight:	282.38
Molecular Formula:	C <sub>18</sub> H <sub>22</sub> N <sub>2</sub> O
Purity:	99% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml), Ethanol (up to 20 mg/ml)
Physical Description:	Orange solid
Storage and Stability:	Store as supplied desiccated at room temperture for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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