

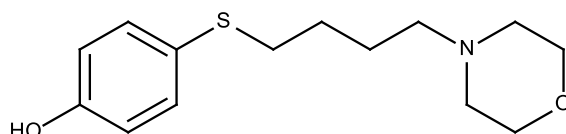
Catalog # 10-1124

MoTP

CAS# 57055-82-0

4-(4-Morpholinobutylthio)phenol

Lot # X10132



Specifically ablates zebrafish larval melanocytes. Melanocytotoxicity is dependent on tyrosinase activity^{1,2}. A useful tool for elucidating melanocyte stem cell regeneration, recruitment and maintenance³⁻⁵.

- 1) Yang *et al.* (2006), *Small molecule-induced ablation and subsequent regeneration of larval zebrafish melanocytes*; *Development*, **133** 3563
- 2) Yang *et al.* (2007), *Mutations in *gfpt1* and *skiv2l2* cause distinct stage-specific defects in larval melanocyte regeneration in zebrafish*; *PLoS Genet.*, **3** e88
- 3) Hultman *et al.* (2009), *Defects in *ErbB*-dependent establishment of adult melanocyte stem cells reveal independent origins for embryonic and regeneration melanocytes*; *PLoS Genet.*, **5** e1000544
- 4) Hultman *et al.* (2010), *Differential contribution of direct-developing and stem cell-derived melanocytes to the zebrafish larval pigment pattern*; *Dev. Biol.*, **337** 425
- 5) Hultman *et al.* (2008), *Small molecule modifier screen for *kit*-dependent functions in zebrafish embryonic melanocytes*; *Zebrafish*, **5** 279

PHYSICAL DATA

Molecular Weight:	267.39
Molecular Formula:	C ₁₄ H ₂₁ NO ₂ S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml), Ethanol (up to 25 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.