

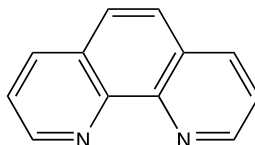
Catalog # 10-3017

1,10-Phenanthroline Hydrochloride Hydrate

CAS# 18851-33-7

o-Phenanthroline hydrochloride hydrate

Lot # X101902



·HCl H₂O

1,10-Phenanthroline is a high affinity chelator of divalent metal ions and may be used to inhibit zinc metalloenzymes.¹ It is a potent inhibitor of JAMM-type isopeptidases (DUBs) acting via chelation of an active site Zn²⁺. It may be used when preparing cell lysates for enrichment of ubiquitinated proteins which are especially sensitive to DUBs in the JAMM family.^{2,3}

- 1) Swann *et al.* (1981) *Zinc metalloenzyme properties of active and latent collagenase from rabbit bone*. *Biochem.J.* **195** 41
- 2) Cooper *et al.* (2009) *K63-specific deubiquitination by two JAMM/MPN+ complexes: BRISC-associated Brcc36 and proteasomal Poh1* *EMBO J.* **28** 621
- 3) Lu *et al.* (2015) *Substrate degradation by the proteasome: A single-molecule kinetic analysis* *Science* **348** 200

PHYSICAL DATA

Molecular Weight:	234.68
Molecular Formula:	C ₁₂ H ₈ N ₂ ·HCl·H ₂ O
Purity:	>98% (TLC)
	NMR: (Conforms)
Solubility:	DMSO (5 mg/ml); Water (2 mg/mL)
Physical Description:	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 Water may be stored at -20°C for up to 3 months.

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