

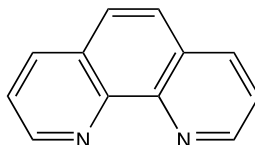
**Catalog # 10-3017**

**1,10-Phenanthroline Hydrochloride Hydrate**

CAS# 3829-86-5

o-Phenanthroline hydrochloride hydrate

Lot # X101902



·HCl H<sub>2</sub>O

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

- 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 <sub>12</sub> H <sub>8</sub> N <sub>2</sub> ·HCl·H <sub>2</sub> 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.

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