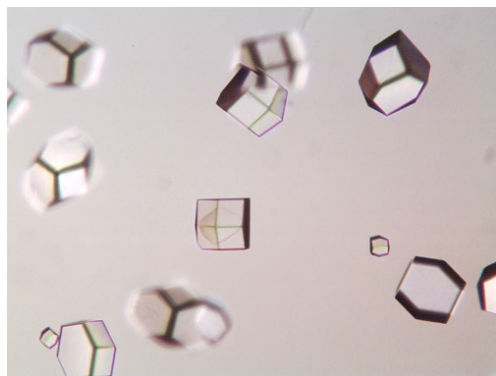




## Lysozyme - Solution

Crystallization grade model protein  
Mucopolysaccharide N-acetylmuramoyl-hydrolase, Muramidase

Cat. No.	Amount
CO-401	5 ml



Lysozyme crystals grown in the presence of 8 % w/v Sodium Chloride and 100 mM Sodium Acetate pH 4.2.

### For general laboratory use.

**Shipping:** shipped at ambient temperature

**Storage Conditions:** store at 4 °C

**Additional Storage Conditions:** do not freeze

**Shelf Life:** 12 months

**Molecular Weight:** 14.3 kDa (single chain)

**CAS#:** 12650-88-3

**EC number:** 235-747-3

**Form:** aqueous solution

**Concentration:** 20 mg/ml

**pH:** 3.5 (H<sub>2</sub>O, 20 °C)

**Solubility:** 300 g/l in water

### Applications:

Lysozyme can be utilized as model protein in crystallization experiments and X-ray structure analysis.

### Description:

Lysozyme is a glycosidase which hydrolyzes the  $\beta$  1,4 glycosidic bond between N-acetylmuramic acid and N-acetyl-D-glucosamine residues in the bacterial peptidoglycan<sup>[1]</sup>.

**Source:** Chicken egg white

### Usage:

Crystals can be grown using the sitting drop, hanging drop or microbatch method.

Following crystallization conditions are suggested for lysozyme crystal growth:

- 0.7 - 1.5 M Sodium Chloride, 100 mM Sodium Acetate pH 4.0 - 4.8<sup>[2]</sup>
- 10 % w/v Sodium Chloride, 5% v/v Propanol<sup>[2]</sup>
- 0.44 M Sodium Nitrate, 100 mM Sodium Acetate pH 4.6<sup>[2]</sup>

### Activity:

50 kU/mg (*Micrococcus luteus*, FIP-Standard; pH 7.0; 25 °C)

### Selected References:

[1] Rye *et al.* (2000) Glycosidase mechanisms. *Curr. Opin. Chem. Biol.* **4**:573.

[2] Gilliland *et al.* (2002) The Biological Macromolecule Crystallization Database: crystallization procedures and strategies. *Acta Cryst. D* **58**:916.