Protease Inhibitor Cocktail (100X, with EDTA)

Cat. # P1092-1, P1092-5, P1092-10, P1092-20

Also Known as: Protease inhibitor cocktail

Component	**Protease Target**	**Inhibitor Type**	**100 X Inhibitor Conc.**
Aprotinin	Serine proteases	Reversible	0.08 mM
Pepstatin A	Aspartic acid proteases	Reversible	1 mM
Bestatin	Amino-peptidases	Reversible	5 mM
AEBSF HCl	Serine proteases	Irreversible	100 mM
Leupeptin Hemisulfate	Serine/cysteine proteases	Reversible	2 mM
E64D	Cysteine proteases	Irreversible	1.5 mM
EDTA	Metalloproteases	Irreversible	0.5 M **(in separate vial)**

Form: Solution in DMSO except EDTA.
100X EDTA was prepared in water, adjusted to pH8 and provided in a separate vial.

Concentration: 100X stock

Quality Assurance: ≥98% purity

Description: The Protease Inhibitor Cocktail (100X, with EDTA) contains an optimized mixture of six protease inhibitors prepared in DMSO as a ready-to-use 100X stock. The inhibitors (Aprotinin, AEBSF, Bestatin, E64, Leupeptin Hemisulfate, and Pepstatin A) in the cocktail provide a broad-spectrum protection against serine proteases, cysteine proteases, aspartic acid proteases and aminopeptidases in mammalian cells and tissues, as well as in bacterial cells.

0.5M EDTA was prepared in water (100X, adjusated to pH 8 using NaOH) and provided in a separate vial. Add EDTA to the lysis buffer at a final working concentration of 5 mM.

To prepare 1X Protease Inhibitor Cocktail-containing lysis buffer:
1) Thaw the Protease Inhibitor Cocktail under room temperature or warm up in your palm.
2) Add an appropriate amount of the cocktail stock into lysis buffer directly (1 to 100 dilution, such as 0.1 ml cocktail solution into 9.8 ml lysis buffer, vortex immediately to dissolve inhibitors. Lastly, add 0.1 ml 100X EDTA and mix well.
Do not add EDTA if the lysate is used for Ni^{2+}- or Co^{2+}-resin based affnity protein purification.

Storage: Wet ice shipping. Store at -20°C upon receiving; avoid multiple freeze-thaw cycles. Stock is stable for one year if stored at -20°C.