

# PROTEASE INHIBITORS

Don't Lose Your Proteins During Sample Prep



## Protect Your Proteins

Protease inhibitors are valuable and useful reagents for researchers who want to inhibit general degradation of proteins in tissue or cell extracts by endogenous proteases. During isolation and characterization, proteases may pose a threat to the fate of a protein.

Four main classes of proteolytic enzymes are routinely utilized to describe proteases:

- **Serine Protease Class** includes trypsin, chymotrypsin and elastase.
- **Cysteine Protease Class** includes papain, calpain and lysosomal cathepsins.
- **Aspartic Protease Class** includes pepsin and rennin
- **Metallo-protease Class** include thermolysin and carboxypeptidase A

During isolation and characterization, one or all four classes of proteases may pose a threat to the fate of a protein. Broad spectrum protease inhibitors and cocktails (mixtures) have been developed to protect the integrity of proteins against multiple classes of proteases.

Protease inhibitor cocktails have been developed to safeguard the integrity of proteins during extraction and purification, to protect your proteins during sample prep. Sigma-Aldrich offers the broadest range of well-established individual protease inhibitors and protease inhibitor cocktails on the market. In addition to the Sigma-Aldrich line of protease inhibitor cocktails, our product offerings now include Roche's cOmplete protease inhibitor cocktail tablets.

Sigma-Aldrich offers the broadest range of well-established individual protease inhibitors and protease inhibitor cocktails that are optimized to maintain and preserve protein functionality following cell lysis.

- Product offerings now include Roche's cOmplete protease inhibitor cocktail tablets
- Available in powder, solution, or tablet form
- Inhibits proteases in almost any sample type (tissue or cell)
- Specific formulations optimized for particular applications

View our individual protease inhibitors at [sigma-aldrich.com/proteaseinhibitors](http://sigma-aldrich.com/proteaseinhibitors)

View our protease inhibitor cocktails at [sigma-aldrich.com/proteaseinhibitorscocktails](http://sigma-aldrich.com/proteaseinhibitorscocktails)

SIGMAFAST™ Protease Inhibitor Cocktail Tablets, EDTA-Free (**Cat. No. 58830**) for use in purification of Histidine-tagged proteins.

Are you currently using Western blot analysis in your research? Learn how to protect your Westerns from failure at [sigma.com/westernblot](http://sigma.com/westernblot)

# Protease Inhibitor Cocktails

Cat. No.	Sample Type	Specificity of Inhibition	Additional information	Package sizes
I3911	General	Serine, cysteine, aspartic, and metalloproteases	Lyophilized powder that is water-soluble	1 bottle prepares 100 mL of cocktail solution
04693116001	General	Serine, cysteine, and metalloproteases	Standard-Roche cOplete	20 tablets
11697498001	General	Serine, cysteine, and metalloproteases	Standard-Roche cOplete	20 tablets
11836145001	General	Serine, cysteine, and metalloproteases	Standard-Roche cOplete	3 × 20 tablets
04693124001	General	Serine, cysteine, and metalloproteases	Mini-Roche cOplete	30 tablets
11836153001	General	Serine, cysteine, and metalloproteases	Mini-Roche cOplete	25 tablets
05892988001	General	Serine, cysteine, metallo-, and aspartic proteases	ULTRA-Roche cOplete	2 × 10 tablets
06538304001	General	Serine, cysteine, metallo-, and aspartic proteases	ULTRA-Roche cOplete	6 × 10 tablets
05892970001	General	Serine, cysteine, metallo-, and aspartic proteases	ULTRA, Mini-Roche cOplete	30 tablets
P2714	General	Serine, cysteine, aspartic and metalloproteases	Optimized and tested for general use	1 bottle prepares 100 mL of cocktail solution
S8820	General	Serine, cysteine, aspartic and metalloproteases	Optimized and tested for general use	20 tablets
P8465	Bacterial	Serine, cysteine, aspartic, metalloproteases and aminopeptidases	Various E. coli strains	5 mL, 25mL
P8340	Mammalian	serine, cysteine, aspartic proteases, and aminopeptidases	Use at 1:100 for undiluted blood samples, liver tissue extracts and CHO cell lysates	1mL, 5mL
I3786	Mammalian	serine, cysteine, aspartic proteases, and aminopeptidases	Solution in DMSO	• 1 mL • 5 mL
MSSAFE	Mammalian	Protease/Phosphatase Inhibitor	Lyophilized powder that is water-soluble	1VL
P9599	Plant	Serine, cysteine, aspartic, metalloproteases and aminopeptidases	Tested on extracts from kidney bean, pea, wheat, tobacco and Arabidopsis	1mL, 5mL
P8215	Yeast	Serine, cysteine, aspartic and metalloproteases	Saccharomyces cerevisiae cells	1mL, 5mL
04693132001	Histidine-tagged proteins	Serine, cysteine	EDTA-free-Roche cOplete	20 tablets
11873580001	Histidine-tagged proteins	Serine and cysteine proteases	EDTA-free-Roche cOplete	20 tablets
05056489001	Histidine-tagged proteins	Serine and cysteine proteases	EDTA-free-Roche cOplete	3 × 20 tablets
04693159001	Histidine-tagged proteins	Serine and cysteine proteases	Mini, EDTA-free-Roche cOplete	30 tablets
11836170001	Histidine-tagged proteins	Serine and cysteine proteases	Mini, EDTA-free-Roche cOplete	25 tablets, glass vials
05892953001	Histidine-tagged proteins	Serine, cysteine, and aspartic proteases	ULTRA, EDTA-free-Roche cOplete	2 × 10 tablets
06538282001	Histidine-tagged proteins	Serine, cysteine, and aspartic proteases	ULTRA, EDTA-free-Roche cOplete	6 × 10 tablets
05892791001	Histidine-tagged proteins	Serine, cysteine, and aspartic proteases	ULTRA, Mini, EDTA-free-Roche cOplete	30 tablets
P8849	Histidine-tagged proteins	Serine, cysteine, aspartic and thermolysin-like proteases and aminopeptidases	E. coli cells; baculovirus infected Spodoptera frugiperda pupal ovary cells	1mL, 5mL
S8830	Histidine-tagged proteins	Serine, cysteine, aspartic and metalloproteases	Optimized and tested for use with HIS-Select media	20 tablets
P1860	Tissue Culture Media	Serine cysteine, aspartic proteases and aminopeptidases	After 48 hours in medium, add fresh inhibitors in fresh medium	1 mL

Find individual protease inhibitors at  
[sigma-aldrich.com/proteaseinhibitors](http://sigma-aldrich.com/proteaseinhibitors)

Enabling Science to  
 Improve the Quality of Life

Order/Customer Service: [sigma-aldrich.com/order](http://sigma-aldrich.com/order)  
 Technical Service: [sigma-aldrich.com/techservice](http://sigma-aldrich.com/techservice)  
 Development/Custom Manufacturing Inquiries **SAFC**<sup>®</sup> [safcglob@sigma-aldrich.com](mailto:safcglob@sigma-aldrich.com)  
 Safety-related Information: [sigma-aldrich.com/safetycenter](http://sigma-aldrich.com/safetycenter)

World Headquarters  
 3050 Spruce St.  
 St. Louis, MO 63103  
 (314) 771-5765  
[sigma-aldrich.com](http://sigma-aldrich.com)