

Protease Inhibitor Cocktail (EDTA free)

Inhibition of intra and extra cellular proteases is vital to purify and collect the expressed proteins. Saving trouble of finding adequate inhibitors, a wide range of proteases are inhibited by the Protease Inhibitor Cocktail. This product does not interfere with metalloproteins since it is EDTA free.

- The product does not contain phosphorylated proteins.
 - The product is phosphatase free.
 - The preservative in the product does not affect the enzyme activity of horseradish peroxidase (HRP).
- » **Wide range** - contains inhibitors for a variety of serin and cysteine protease
 - » **Contain no EDTA** - efficient for purification of metalloproteins and His tag gene exchanged proteins
 - » **Easy to use** - dilute according to your need (100x stock concentration)

Application

Comparison of EDTA containing and EDTA free inhibitor activity for Thermolysin

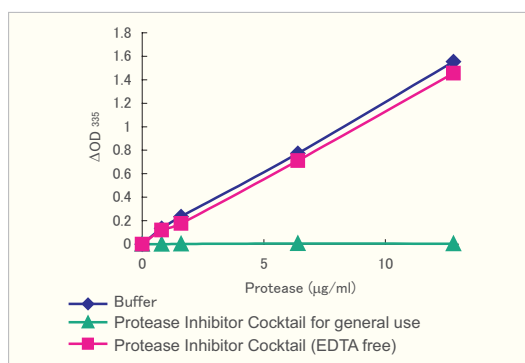


Figure 1. Thermolysin (from *Bacillus thermoproteolyticus*) is a metalloprotease. The compared protease inhibitors do not inhibit Thermolysin activity. The presence EDTA in the common product inhibits Thermolysin, while the EDTA free product does not cause damage.

	Thermolysin (μg/ml)			
	0.8	1.6	6.4	12.8
Protease Inhibitr Cocktail for General Use	100.0	99.6	99.2	99.7
Protease Inhibitr Cocktail (EDTA free)	9.7	8.2	8.0	6.3

Figure 2. The decrease in Thermolysin activity (in %) in the presence of protease inhibitor cocktails.

Composition

Inhibitors	#04080-11 for General Use	#03969-21 EDTA free	#25955-11 for Mammalian
4-(2-Aminoethyl) benzenesulfonyl fluoride hydrochloride (AEBSF)	✓	✓	✓
Aprotinin	✓	✓	✓
E-64	✓	✓	✓
Leupeptin hemisulfate monohydrate	✓	✓	✓
Disodium dihydrogen ethylenediaminetetraacetate dihydrate	✓		
Bestatin			✓
Pepstatin A			✓

Reference

1. Okada, S. et al. The Journal of Cellular Physiology 226(2), 552-558 (2011)
2. Yang, JH. et al. The Journal of Biological Chemistry (2010)
3. Iyama, T. et al. Nucl. Acids Res. 38(14), 4834-4843 (2010)
4. Kimura, Y. et al. Cancer Research 70(2), 501-511 (2010)
5. Burnett, T. J. et al. J. Bacteriol 165, 139-145 (1986)
6. Hagiwara B et al. J. Biochem., 45, 185-194 (1958)

Ordering Information

Product name	Storage	Product number	PKG size
Protease Inhibitr Cocktail for General Use (100x)	-20°C	04080-11	5 x 1 ml
Protease Inhibitr Cocktail (EDTA free) (100x)	-20°C	03969-21	5 x 1 ml
Protease Inhibitr Cocktail for Use with Mammalian Cell and Tissue Extracts (100x)	-20°C	25955-11	5 x 1 ml

For research use only, not intended for diagnostic or drug use.

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