

# **COmplete ULTRA Tablets, Mini, EASYpack**Protease Inhibitor Cocktail Tablets in foil blister packs

Version: 06
Content Version: March 2021

For the inhibition of proteases during cell extraction and in lysates from mammalian, bacterial, yeast, or plant cells

Cat. No. 05 892 970 001 30 tablets

individually packed in foil blister packs.

Store product at +2 to +8°C.

1.	General Information	3
1.1.	Contents	3
1.2.	Storage and Stability	3
	Storage Conditions (Product)	
	Storage Conditions (Working Solution)	
1.3.	Application	3
2.	How to Use this Product	4
2.1.	Before you Begin	4
	Safety Information	
	Working Solution	
	Direct use with lysates	
	Preparation of a 2x-concentrated stock solution	
2.2.	Parameters	
	Working Concentration	4
3.	Additional Information on this Product	4
3.1.	Quality Control	4
4.	Supplementary Information	5
4.1.	Conventions	
4.2.	Changes to previous version	5
4.3.	Ordering Information	5
4.4.	Trademarks	6
4.5.	License Disclaimer	6
4.6.	Regulatory Disclaimer	6
4.7.	Safety Data Sheet	6
4.8.	Contact and Support	6

#### 1. General Information

#### 1.1. Contents

Package	Label	Function / Description	Content
1	cOmplete ULTRA Tablets,	Each tablet is sufficient for a volume of	30 foil blister packs,
	Mini	10 ml extraction solution.	1 tablet each

## 1.2. Storage and Stability

#### **Storage Conditions (Product)**

When stored at +2 to +8°C, the product is stable through the expiration date printed on the label.

Package	Label	Storage
1	cOmplete ULTRA Tablets, Mini	Store dry at +2 to +8°C.

#### **Storage Conditions (Working Solution)**

Store stock solution at +2 to +8°C for 4 weeks or -15 to -25°C for at least 4 weeks.

⚠ During storage of the 2x stock solution, the particles can sediment. Briefly vortex the stock solution prior to use.

## 1.3. Application

cOmplete ULTRA Tablets, Mini effectively inhibit a broad range of proteases (serine, cysteine, aspartic, and metalloproteases) to protect target proteins and to preserve their full length and structure. During cell lysis and purification, target proteins are at risk of being cleaved by proteases, which are naturally present in cells. With 8 powerful protease inhibitors, cOmplete ULTRA Tablets, Mini have been optimized for lysates from:

- Yeast
- Bacteria
- Plants
- Mammalian cell extracts, such as HEK-293 and CHO

cOmplete ULTRA Tablets, Mini contains both irreversible and reversible protease inhibitors, therefore add cOmplete to all stock buffers and solutions normally protected with protease inhibitors, and not only during the initial purification steps.

Since cOmplete ULTRA Tablets, Mini contains EDTA (3.7 mg/tablet yields a 1 mM solution of EDTA in 10 ml), the extraction buffer should not contain divalent cations such as Ca²+, Mg²+, or Mn²+ otherwise the inhibition of the metalloproteases might be incomplete. If the downstream application involves purification of his-tagged proteins with IMAC (Immobilized Metal Affinity Chromatography), the cOmplete His-Tag Purification Resin\* and cOmplete His-Tag Purification Column\* can be used, even with EDTA.

⚠ Unless explicitly stated otherwise, EDTA must be eliminated with all other IMAC matrices prior to the chromatography (by dialysis).

#### 2. How to Use this Product

## 2.1. Before you Begin

#### **Safety Information**

Do not eat the tablets.

Always wear gloves.

## **Working Solution**

**Carefully push the tablet through the foil packaging using the base of your thumb (not fingernail) to prevent the breakage of tablets.** 

#### **Direct use with lysates**

One cOmplete ULTRA Tablet is sufficient for the inhibition of the proteolytic activity in 10 ml extraction solution. When very high proteolytic activity is present, 2 tablets may be used in 10 ml of extraction solution.

1 Tablets can be added directly to the extraction medium.

#### Preparation of a 2x-concentrated stock solution

Alternatively to the **Direct use with lysates** method, a 2x-concentrated stock solution can be prepared.

- Add one cOmplete ULTRA Tablet, Mini to 5 ml double-distilled water in a PE or PP tube.
- 2 Vortex 3 minutes until the tablet is dissolved.
  - The stock solution is ready to use even if there are very fine particles still visible in the solution. These particles do not interfere with the inhibition performance of the tablets.

#### 2.2. Parameters

## **Working Concentration**

1 tablet per 10 ml extraction solution.

## 3. Additional Information on this Product

## 3.1. Quality Control

The inhibitory activity of each lot is tested using a concentrated pancreas extract, as well as with Proteinase K, Trypsin, and Thermolysin. Inhibitory effects are measured after one hour of incubation using Universal Protease Substrate, Casein, resorufin-labeled\*.

# 4. Supplementary Information

#### 4.1. Conventions

To make information consistent and easier to read, the following text conventions and symbols are used in this document to highlight important information:

Text convention and symbols				
1 Information Note: Additional information about the current topic or procedure.				
⚠ Important Note: Information critical to the success of the current procedure or use of the product.				
1 2 3 etc.	Stages in a process that usually occur in the order listed.			
1 2 3 etc.	Steps in a procedure that must be performed in the order listed.			
* (Asterisk)	The Asterisk denotes a product available from Roche Diagnostics.			

# 4.2. Changes to previous version

Layout changes. Editorial changes.

# 4.3. Ordering Information

Product	Pack Size	Cat. No.
Reagents, kits		
cOmplete His-Tag Purification Resin	25 ml, settled resin volume	05 893 682 001
	200 ml, settled resin volume	05 893 801 001
cOmplete His-Tag Purification Column	1 column, 1 column containing 5 ml of cOmplete His-Tag Purification Resin	06 781 535 001
	5 x 1 ml columns, 5 columns containing 1 ml of cOmplete His-Tag Purification Resin	06 781 543 001
Universal Protease Substrate	40 mg	11 734 334 001

#### 4.4. Trademarks

All product names and trademarks are the property of their respective owners.

#### 4.5. License Disclaimer

For patent license limitations for individual products please refer to: **List of biochemical reagent products**.

## 4.6. Regulatory Disclaimer

For life science research only. Not for use in diagnostic procedures.

## 4.7. Safety Data Sheet

Please follow the instructions in the Safety Data Sheet (SDS).

## 4.8. Contact and Support

To ask questions, solve problems, suggest enhancements or report new applications, please visit our **Online Technical Support Site**.

To call, write, fax, or email us, visit **sigma-aldrich.com**, and select your home country. Country-specific contact information will be displayed.

