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Not for use in diagnostic procedures.



# cOmplete ULTRA Tablets, glass vials

 **Version: 04**

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

**Cat. No. 05 892 988 001** 2 x 10 tablets

**Cat. No. 06 538 304 001** 6 x 10 tablets

**Store product at +2 to +8°C.**

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# 1. General Information

## 1.1. Contents

Vial / Bottle	Label	Function / Description	Catalog Number	Content
1	cOplete ULTRA Tablets	Each tablet is sufficient for a volume of 50 ml extraction solution.	05 892 988 001	2 glass vials, 10 tablets each
			06 538 304 001	6 glass vials, 10 tablets 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.

Vial / Bottle	Label	Storage
1	cOplete ULTRA Tablets	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

cOplete ULTRA Tablets 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, cOplete Ultra Tablets have been optimized for lysates from:

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

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

Since cOplete ULTRA contains EDTA (18.5 mg/tablet yields a 1 mM solution of EDTA in 50 ml), the extraction buffer should not contain divalent cations such as Ca<sup>2+</sup>, Mg<sup>2+</sup>, or Mn<sup>2+</sup> 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 cOplete His-Tag Purification Resin\* and cOplete 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.**

#### Laboratory procedures

- Handle all samples as if potentially infectious, using safe laboratory procedures. As the sensitivity and titer of potential pathogens in the sample material varies, the operator must optimize pathogen inactivation by the Lysis / Binding Buffer or take appropriate measures, according to local safety regulations.
- Do not eat, drink or smoke in the laboratory work area.
- Do not pipette by mouth.
- Wear protective disposable gloves, laboratory coats and eye protection, when handling samples and kit reagents.
- Wash hands thoroughly after handling samples and reagents.

#### Waste handling

- Discard unused reagents and waste in accordance with country, federal, state, and local regulations.
- Safety Data Sheets (SDS) are available online on [dialog.roche.com](http://dialog.roche.com), or upon request from the local Roche office.

### Working Solution

#### Direct use with lysates

One cOmplete ULTRA Tablet is sufficient for the inhibition of the proteolytic activity in 50 ml extraction solution. When very high proteolytic activity is present, use 2 tablets in 50 ml of extraction solution.

**i** *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.

**1** Add one cOmplete ULTRA Tablet to 25 ml double-distilled water in a PE or PP tube.

**2** Vortex 4 minutes until the tablet is dissolved.

**i** *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 50 ml extraction solution.

## 3. Additional Information on this Product

### 3.1. Quality Control

For lot-specific certificates of analysis, see section **Contact and Support**.

## 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

 *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.**

   etc. Stages in a process that usually occur in the order listed.

   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.

Update to include new safety Information to ensure handling according controlled conditions.

### 4.3. Ordering Information

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

### 3. Additional Information on this Product

#### 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.

