



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



6042 Cornerstone Court West, Ste. B  
San Diego CA 92121  
Tel: 1.858.202.1401  
Fax: 1.858.481.8694  
Email: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

**Data Sheet**  
***Homogeneous Caspase-7 Assay Kit***  
Catalog #80701  
Size: 96 reactions

**DESCRIPTION:** Caspase-7 is a member of the caspase (cysteine aspartate protease) family of proteins, and has been shown to be an executioner protein of apoptosis. The *Homogeneous Caspase-7 Assay Kit* is a complete assay system designed to measure Caspase-7 activity for screening and profiling applications. It comes in a convenient 96-well format, with all the reagents necessary for 100 fluorescent Caspase-7 activity measurements. In addition, the kit includes purified Caspase-7 enzyme and a potent Caspase-3/7 inhibitor, Ac-DNLD-CHO, for use as a positive and negative control. Using this kit, only one simple step on a microtiter plate is needed to analyze the Caspase-7 activity level. The fluorogenic substrate, Ac-DEVD-AFC, is incubated with purified Caspase-7 and the enzymatic activity releases AFC fluorophore that can then be measured using a fluorescence reader.

**COMPONENTS:**

Catalog #	Component	Amount	Storage	
70000	Recombinant Human Caspase-7	5 µg	-80°C	<b>Avoid freeze/ thaw cycles!</b>
	Caspase-7 Substrate (0.1 mM)	50 µl	-80°C	
	5x Caspase Assay Buffer 1	20 ml	-20°C	
	DTT (0.5 M)	200 µl	-20°C	
	Ac-DNLD-CHO	20 µl	-80°C	
	black, low binding NUNC black microtiter plate	1	Room Temperature	

**MATERIALS OR INSTRUMENTS REQUIRED BUT NOT SUPPLIED:**

Fluorescent microplate reader capable of reading exc/em=380nm/500nm

**APPLICATIONS:** Great for studying enzyme kinetics and HTS applications.

**STABILITY:** One year from date of receipt when stored as directed.

**REFERENCES:**

1. Chai, J., *et al.*, *Cell*, 2001 Mar 9;**104(5)**:769-80.
2. Denault, J.B., and Salvesen, G.S., *J. Biol. Chem.*, 2003 Sep 5;**278(36)**:34042-50.

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** Fax **1.858.481.8694**

Or you can Email us at: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

Please visit our website at: [www.bpsbioscience.com](http://www.bpsbioscience.com)

**ASSAY PROTOCOL:**

**All samples and controls should be tested in duplicate.**

- 1) Prepare **1x assay buffer** containing 5 mM DTT from **5x Caspase Assay Buffer**. For example, add 200  $\mu$ l **5x Caspase Assay Buffer** and 10  $\mu$ l 0.5M DTT to 790  $\mu$ l H<sub>2</sub>O to make 1 ml **1x assay buffer**.
- 2) Prepare the master mixture: N wells  $\times$  (24.5  $\mu$ l **1x assay buffer** + 0.5  $\mu$ l 0.1 mM **Caspase-7 substrate**).
- 3) Add 25  $\mu$ l of master mixture to wells labeled "Positive Control", "Test Sample", "Negative Control", and "Blank".
- 4) Prepare solution of test inhibitor that is 10-fold higher than the final concentration.
- 5) Add 5  $\mu$ l of the test inhibitor solution to the wells designated as "Test Sample". Add 5  $\mu$ l of the inhibitor buffer (without inhibitor) to the wells labeled "Blank" and "Positive Control". Add 5  $\mu$ l of control compound, **Ac-DNLD-CHO**, to the wells designated "Negative Control".
- 6) Thaw **Caspase-7** on ice. Upon first thaw, briefly spin tube containing enzyme to recover full content of the tube. Aliquot **Caspase-7** into single use aliquots. Store remaining undiluted enzyme in aliquots at -80°C. *Note: **Caspase-7** enzyme is sensitive to freeze/thaw cycles. Do not re-use thawed aliquots or diluted enzyme.*
- 7) Dilute **Caspase-7** in **1x assay buffer** at 0.05 ng/ $\mu$ l (1 ng per reaction).
- 8) Add 20  $\mu$ l of **1x assay buffer** to wells designated "Blank".

Component	Positive Control	Test Sample	Negative Control	Blank
1x assay buffer	24.5 $\mu$ l	24.5 $\mu$ l	24.5 $\mu$ l	44.5 $\mu$ l
Substrate	0.5 $\mu$ l	0.5 $\mu$ l	0.5 $\mu$ l	0.5 $\mu$ l
Test Inhibitor	-	5 $\mu$ l	-	-
Ac-DNLD-CHO	-	-	5 $\mu$ l	-
Inhibitor Buffer (no inhibitor)	5 $\mu$ l	-	-	5 $\mu$ l
Caspase-7 (0.05 ng/ $\mu$ l)	20 $\mu$ l	20 $\mu$ l	20 $\mu$ l	-
<b>Total</b>	<b>50 <math>\mu</math>l</b>	<b>50 <math>\mu</math>l</b>	<b>50 <math>\mu</math>l</b>	<b>50 <math>\mu</math>l</b>

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

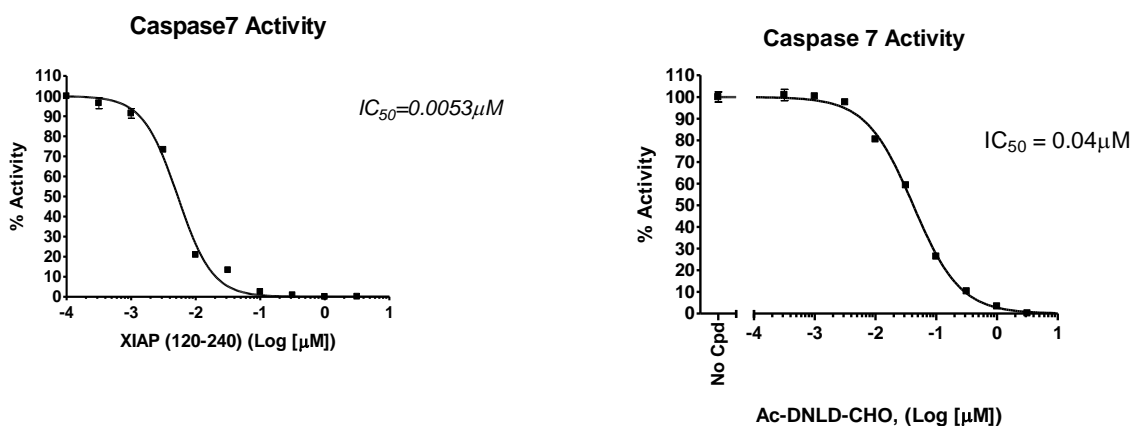
To place your order, please contact us by Phone **1.858.202.1401** Fax **1.858.481.8694**

Or you can Email us at: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

Please visit our website at: [www.bpsbioscience.com](http://www.bpsbioscience.com)

- 9) Initiate reaction by adding 20  $\mu$ l diluted **Caspase-7 solution** to the wells labeled "Positive Control", "Test Sample" and Negative Control".
- 10) Incubate at room temperature for 30 minutes. Measure the fluorescence intensity in a microtiter plate-reading fluorimeter capable of excitation at 380 nm and detection of emission at 500 nm. "Blank" value is subtracted from all other values. Fluorescence measurements may be read over time to determine enzyme kinetics.

#### EXAMPLE OF ASSAY RESULTS:



Inhibition of Caspase-7 enzyme activity using XIAP Bir2 domain (left) or Ac-DNLD-CHO (right), measured using the *Homogeneous Caspase-7 Assay Kit*, BPS Bioscience #80701. Fluorescence intensity was measured using a Tecan fluorescent microplate reader. *Data shown is lot-specific. For lot-specific information, please contact BPS Bioscience, Inc. at [info@bpsbioscience.com](mailto:info@bpsbioscience.com)*

#### RELATED PRODUCTS

<u>Name</u>	<u>Catalog #</u>	<u>Size</u>
Caspase-3 Protein	80500	50 $\mu$ g
Caspase-6 Protein	80113	50 $\mu$ g
Caspase-7 Protein	70000	50 $\mu$ g
Caspase-8 Protein	80114	50 $\mu$ g
Caspase-3 Assay Kit	80700	96 rxns
Caspase-6 Assay Kit	80703	96 rxns
Caspase-8 Assay Kit	80704	96 rxns
XIAP (Bir2, Bir3)	75002	50 $\mu$ g
XIAP (Bir3)	75001	50 $\mu$ g

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** Fax **1.858.481.8694**

Or you can Email us at: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

Please visit our website at: [www.bpsbioscience.com](http://www.bpsbioscience.com)