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

www.szabo-scandic.com

linkedin.com/company/szaboscandic

6042 Cornerstone Court W, Ste B
San Diego, CA 92121
Tel: 1.858.202.1401
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

Data Sheet

HER2 Kinase Assay Kit

Catalog # 40721

DESCRIPTION: HER2 (human epidermal growth factor receptor 2) encoded by ERBB2 gene has been found to be overexpressed in certain aggressive breast cancers, suggesting it as an important drug target as well as a biomarker. The *HER2 Kinase Assay Kit* is designed to measure HER2 kinase activity for screening and profiling applications using Kinase-Glo® MAX as a detection reagent. The *HER2 Kinase Assay Kit* comes in a convenient 96-well format, with enough purified recombinant HER2 enzyme, HER2 substrate, ATP and Kinase Buffer 1 for 100 enzyme reactions.

COMPONENTS:

Catalog #	Reagent	Amount	Storage	
40230	HER2	15 µg	-80°C	***Avoid multiple freeze/ thaw cycles!***
79334	5x Kinase Buffer 1	1.5 ml	-20°C	
79686	ATP (500 µM)	100 µl	-20°C	
40217	PTK substrate Poly(Glu:Tyr 4:1) (10 mg/ml)	100 µl	-20°C	
79696	96-well plate, white	1	Room Temp.	

MATERIALS OR INSTRUMENTS REQUIRED BUT NOT SUPPLIED:
Kinase-Glo MAX (Promega, #V6071)
Dithiothreitol (DTT, 1 M; optional)
Microplate reader capable of reading luminescence
Adjustable micropipettor and sterile tips
30°C incubator

APPLICATIONS: Useful for studying enzyme kinetics and screening small molecular inhibitors for drug discovery and HTS applications.

STABILITY: Up to 6 months when stored as recommended.

REFERENCE:
Tai, W. *et al., Journal of Controlled Release* **146(3):**264-275 (2010)

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

6042 Cornerstone Court W, Ste B
San Diego, CA 92121
Tel: 1.858.202.1401
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

ASSAY PROTOCOL:
All samples and controls should be tested in duplicate.

1) Thaw **5x Kinase Buffer 1**, **ATP** and **PTK substrate Poly (Glu:Tyr 4:1) (10 mg/ml)**.
(Optional: If desired, add DTT to **5x Kinase Buffer 1** to make a 10 mM concentration; *e.g.* add 10 µl of 1 M DTT to 1 ml **5x Kinase Buffer 1**)

2) Prepare the master mixture (25 µl per well): N wells x (6 µl **5x Kinase Buffer 1** + 1 µl **ATP (500 µM)** + 1 µl **PTK substrate Poly (Glu:Tyr 4:1) (10 mg/ml)**+ 17 µl water). Add 25 µl to every well.

	Positive Control	Test Inhibitor	Blank
5x Kinase Buffer 1	6 µl	6 µl	6 µl
ATP (500 µM)	1 µl	1 µl	1 µl
PTK substrate (10 mg/ml)	1 µl	1 µl	1 µl
Water	17 µl	17 µl	17 µl
Test Inhibitor	–	5 µl	–
Inhibitor Buffer (no inhibitor)	5 µl	–	5 µl
1x Kinase buffer	–	–	20 µl
HER2 (7 ng/µl)	20 µl	20 µl	–
Total	50 µl	50 µl	50 µl

3) Add 5 µl of Inhibitor solution of each well labeled as “Test Inhibitor”. For the “Positive Control" and “Blank”, add 5 µl of the same solution without inhibitor (Inhibitor buffer).

4) Prepare 3 ml of **1x Kinase Buffer 1** by mixing 600 µl of **5x Kinase Buffer 1** with 2400 µl water. 3 ml of **1x Kinase Buffer 1** is sufficient for 100 reactions.

5) To the wells designated as "Blank", add 20 µl of **1x Kinase Buffer 1**.

6) Thaw **HER2** enzyme on ice. Upon first thaw, briefly spin tube containing enzyme to recover full content of the tube. Calculate the amount of **HER2** required for the assay and dilute enzyme to 7 ng/µl with **1x Kinase Buffer 1**. Store remaining undiluted enzyme in aliquots at -80°C. *Note: **HER2** enzyme is sensitive to freeze/thaw cycles. Avoid multiple freeze/thaw cycles. Do not re-use thawed aliquots or diluted enzyme.*

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

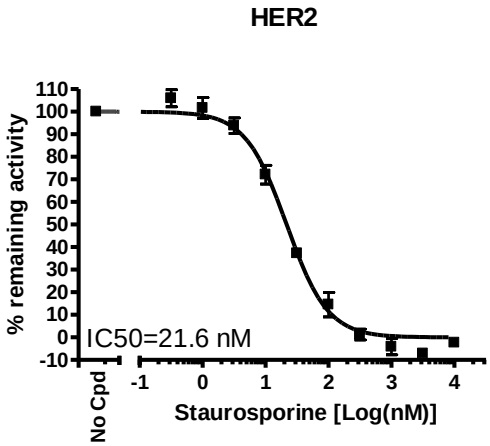
6042 Cornerstone Court W, Ste B
San Diego, CA 92121
Tel: 1.858.202.1401
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

7) Initiate reaction by adding 20 µl of diluted **HER2** enzyme to the wells designated "Positive Control" and "Test Inhibitor". Incubate at 30˚C for 45 minutes.
8) Thaw Kinase-Glo Max reagent.

9) After the 45 minute reaction, add 50 µl of Kinase-Glo Max reagent to each well. Cover plate with aluminum foil and incubate the plate at room temperature for 15 minutes.

10) Measure luminescence using the microplate reader.

Example of Assay Results:



Inhibition of HER2 enzyme by Staurosporine, measured using the *HER2 kinase assay kit* (Cat. #40721). *Data shown is lot-specific. For lot-specific information, please contact BPS Bioscience, Inc. at info@bpsbioscience.com*

RELATED PRODUCTS:

Product Name	Catalog #	Size
HER2, GST-tag	40230	10 µg
HER4, GST-tag	40232	10 µg
EGFR	40187	10 µg
EGFR (L858R)	40189	10 µg
EGFR (T790M)	40188	10 µg
EGFR (T790M, L858R)	40350	10 µg
EGFR (T790M, C797S, L858R)	40351	10 µg
EGFR Kinase Assay Kit	40321	96 rxns
EGFR(T790M/L858R) Kinase Kit	40322	96 rxns
EGFR(T790M) Kinase Kit	40323	96 rxns
EGFR(L858R) Kinase Kit	40324	96 rxns
CUDC-101	27022	5 mg

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