



# 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 W, Ste B  
San Diego, CA 92121  
Tel: 1.858.829.3082  
Fax: 1.858.481.8694  
Email: info@bpsbioscience.com

**Data Sheet**  
**PRMT8 Homogeneous Assay Kit**  
**Catalog #52058**  
**Size: 384 reactions**

**DESCRIPTION:** The *PRMT8 Homogeneous Assay Kit* is designed to measure PRMT8 activity for screening and profiling applications. PRMT8 is a histone methyltransferase that exhibits methylation activity toward histones H2A and H4. The *PRMT8 Homogeneous Assay Kit* comes in a convenient AlphaLISA<sup>®</sup> format, with a 384-well plate, biotinylated histone H4 peptide substrate, primary antibody, methylation assay buffer, and purified PRMT8 for 384 enzyme reactions. The key to the *PRMT8 Homogeneous Assay Kit* is a highly specific antibody that recognizes methylated histone substrate. With this kit, only three simple steps on a microtiter plate are required for methyltransferase detection. First, a sample containing PRMT8 enzyme is incubated with the biotinylated substrate for one hour. Next, acceptor beads and primary antibody are added, then donor beads, followed by reading the Alpha-counts.

**COMPONENTS:**

Catalog #	Components	Amount	Storage	
51052	PRMT8	50 µg	-80°C	<b>Avoid freeze/ thaw cycles!</b>
52120	100 µM S-adenosylmethionine	250 µl	-80°C	
52150-3	Primary antibody 4-3	400 µl	-80°C	
	Biotinylated histone H4 peptide substrate	400 µl	-80°C	
52170-A	4x HMT Assay Buffer 2A	3 ml	-20°C	
52301	4x Detection Buffer	2 ml	-20°C	

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

AlphaLISA<sup>®</sup> anti-rIgG acceptor beads, 5 mg/ml (Perkin Elmer #AL104C)  
AlphaScreen<sup>®</sup> Streptavidin-conjugated donor beads, 5 mg/ml (Perkin Elmer # 6760002)  
OptiPlate-384 (Perkin Elmer #6007290)  
AlphaScreen<sup>®</sup> microplate reader

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

**CONTRAINDICATIONS:** Green and blue dyes that absorb light in the AlphaScreen<sup>®</sup> signal emission range (520-620 nm), such as Trypan Blue. Avoid the use of the potent singlet oxygen quenchers such as sodium azide (NaN<sub>3</sub>) or metal ions (Fe<sup>2+</sup>, Fe<sup>3+</sup>, Cu<sup>2+</sup>, Zn<sup>2+</sup> and Ni<sup>2+</sup>). The presence of >1% RPMI 1640 culture medium leads to a signal reduction due to the presence of excess biotin and iron in this medium. MEM, which lacks these components, does not affect AlphaScreen<sup>®</sup> assays.

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

FOR RESEARCH USE ONLY. NOT FOR HUMAN, DIAGNOSTIC, OR THERAPEUTIC USE.  
To place your order, please contact us by Phone: **1.858.829.3082** 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)

**REFERENCE(S):** Yang, Y., Bedford, M.T. 2013. Nat Rev Cancer. 13(1):37-50.

**ASSAY PROTOCOL:**

All samples and controls should be tested in duplicate.

**Step 1:**

- 1) Prepare the master mixture: N wells x (2.5 µl **4x HMT Assay Buffer 2A** + 0.5 µl **S-adenosylmethionine** (100 µM) + 1.0 µl **Biotinylated substrate** + 0.5 µl water). Add 4.5 µl to wells designated "Positive Control", "Test Sample", and "Blank". To wells labeled "Substrate Control", add 2.5 µl **4x HMT Assay Buffer 2A** + 1.0 µl **Biotinylated substrate** + 1.0 µl water.
- 2) Add 2.5 µl of Inhibitor solution of each well labeled as "Test Inhibitor." For the "Positive Control," "Substrate Control," and "Blank," add 2.5 µl of 4% DMSO in Water (inhibitor buffer).
- 3) Prepare **1x HMT Buffer 2** by adding 1 part of **4x HMT Assay Buffer 2A** to 3 parts water (v/v).
- 4) Thaw **PRMT8** on ice. Upon first thaw, briefly spin tube containing enzyme to recover full content of the tube. Aliquot **PRMT8** enzyme into single use aliquots. Store remaining undiluted enzyme in aliquots at -70°C. *Note: PRMT8 is very sensitive to freeze/thaw cycles. Do not re-use thawed aliquots or diluted enzyme.*
- 5) Dilute **PRMT8** in **1X HMT Assay Buffer 2A** at 25-40 ng/µl. Keep diluted enzyme on ice until use. Discard any unused diluted enzyme after use.

	<b>Positive Control</b>	<b>Test Sample</b>	<b>Substrate Control</b>	<b>Blank</b>
4x HMT Assay Buffer 2A	2.5 µl	2.5 µl	2.5 µl	2.5 µl
100 µM S-adenosylmethionine	0.5 µl	0.5 µl	-	0.5 µl
Biotinylated substrate	1 µl	1 µl	1 µl	1 µl
H <sub>2</sub> O	0.5 µl	0.5 µl	1 µl	3.5 µl
Test Inhibitor/Activator	-	2.5 µl	-	-
4% DMSO in Water (inhibitor buffer)	2.5 µl	-	2.5 µl	2.5 µl
PRMT8 (25-40 ng/µl)	3 µl	3 µl	3 µl	-
<b>Total</b>	<b>10 µl</b>	<b>10 µl</b>	<b>10 µl</b>	<b>10 µl</b>

- 6) To the wells designated as "Blank," add 3 µl of water.

FOR RESEARCH USE ONLY. NOT FOR HUMAN, DIAGNOSTIC, OR THERAPEUTIC USE.

To place your order, please contact us by Phone: **1.858.829.3082** 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)

7) Initiate reaction by adding 3  $\mu$ l of diluted **PRMT8** enzyme to the wells designated "Positive Control," "Substrate Control," and "Test Sample." Incubate at room temperature for 1 hour.

**Step 2:**

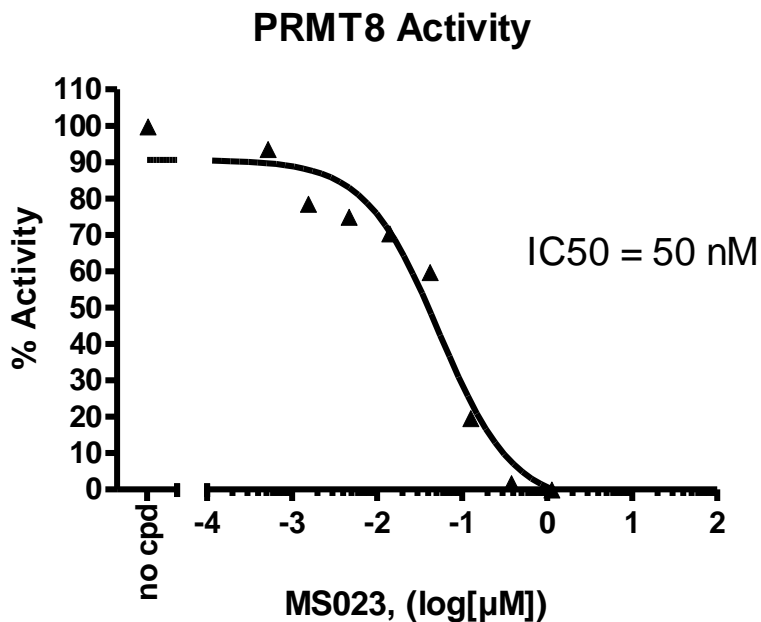
**Note: Protect your samples from direct exposure to light!**

- 1) Dilute anti-Rabbit Acceptor beads (Perkin Elmer #AL104C) 1:250-fold with **1x Detection Buffer**. Add 5  $\mu$ l per well. Shake plate briefly.
- 2) Dilute **Primary antibody 4** 10-fold with **1x Detection Buffer**. Add 5  $\mu$ l per well. Shake plate. Incubate 30 min. at room temperature.

**Step 3:**

- 1) Dilute Streptavidin-conjugated donor beads (PerkinElmer #6760002) 125-fold with **1x Detection Buffer**. Add 10  $\mu$ l per well. Incubate for 10 min. at room temperature.
- 2) Read Alpha-counts. The "Blank" value is subtracted from all other values.

**Example of Assay Results:**



PRMT8 enzyme screening vs. S-Adenosyl-L-homocysteine, measured using the *PRMT8 Homogeneous Assay Kit*, BPS Bioscience Cat. #52058. Data shown is lot-specific. For lot-specific information, please contact BPS Bioscience, Inc. at [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

FOR RESEARCH USE ONLY. NOT FOR HUMAN, DIAGNOSTIC, OR THERAPEUTIC USE.  
To place your order, please contact us by Phone: **1.858.829.3082** 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)



6042 Cornerstone Court W, Ste B  
San Diego, CA 92121  
**Tel:** 1.858.829.3082  
**Fax:** 1.858.481.8694  
**Email:** [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

**RELATED PRODUCTS:**

PRMT1 Homogeneous Assay Kit	#52054	384 reactions
PRMT3 Homogeneous Assay Kit	#52055	384 reactions
PRMT5 Homogeneous Assay Kit	#52052	384 reactions
PRMT6 Homogeneous Assay Kit	#52056	384 reactions
PRMT1 Chemiluminescent Assay Kit	#52004L	96 reactions
PRMT3 Chemiluminescent Assay Kit	#52005L	96 reactions
PRMT4 Chemiluminescent Assay Kit	#52041L	96 reactions
PRMT5 Chemiluminescent Assay Kit	#52002L	96 reactions
PRMT6 Chemiluminescent Assay Kit	#52046	96 reactions
PRMT1 recombinant protein ( <i>E. coli</i> )	#51040	50 µg
PRMT1 recombinant protein (Sf9)	#51041	20 µg
PRMT3 recombinant protein	#51043	50 µg
PRMT4 (CARM 1) recombinant protein	#51047	20 µg
PRMT5 recombinant protein (HEK293)	#51045	20 µg
PRMT5/MEP50 recombinant protein (Sf9)	#51048	20 µg
PRMT6 recombinant protein	#51049	20 µg
PRMT7 recombinant protein	#51054	20 µg
PRMT8 recombinant protein	#51052	20 µg
PRMT9 recombinant protein	#51053	20 µg

AlphaScreen® and AlphaLISA® are registered trademarks of PerkinElmer, Inc.

FOR RESEARCH USE ONLY. NOT FOR HUMAN, DIAGNOSTIC, OR THERAPEUTIC USE.  
To place your order, please contact us by Phone: **1.858.829.3082** 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)