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
BRD9 TR-FRET Assay Kit
Catalog # 32621

DESCRIPTION:
The *BRD9 TR-FRET Assay Kit* is designed to measure the inhibition of BRD9 binding to its substrate in a homogeneous 384 reaction format. This FRET-based assay requires no time-consuming washing steps, making it especially suitable for high throughput screening applications. The assay procedure is straightforward and simple; a sample containing terbium-labeled donor, dye-labeled acceptor, BRD9, substrate, and an inhibitor is incubated for 120 minutes. Then, the fluorescence intensity is measured using a fluorescence reader.

COMPONENTS:

Catalog #	Component	Amount	Storage	
31091	BRD9, GST	10 µg	-80°C	***(Avoid freeze/ thaw cycles!)***
33000	BET Bromodomain Ligand	50 µl	-80°C	
33005	Non-acetylated Ligand 1	15 µl	-80°C	
	Tb donor	2 x 10 µl	-20°C	
	Dye-labeled acceptor	2 x 10 µl	-20°C	
33012	3x BRD TR-FRET Assay Buffer 1	4 ml	-20°C	
	White, Nonbinding, low volume, microtiter plate	1	Room temp.	

MATERIALS OR INSTRUMENTS REQUIRED BUT NOT SUPPLIED:
Fluorescent microplate reader capable of measuring Time Resolved Fluorescence Resonance Energy Transfer (TR-FRET)
Adjustable micropipettor and sterile tips

APPLICATIONS: Great for screening small molecular inhibitors for drug discovery and HTS applications.

STABILITY: At least 6 months from date of receipt when stored as directed.

REFERENCE(S): Filippakopoulos, P., *et al., Cell* 2012; **149**:214.

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.

Protocol for BRD9 Assay

1) Dilute one part **3x BRD TR-FRET Assay Buffer 1** with 2 parts distilled water (3-fold dilution) to make **1x BRD TR-FRET Assay Buffer 1**. Make only a sufficient quantity needed for the assay; store remaining stock solution in aliquots at -20°C.

2) Dilute **Tb-labeled donor** and **Dye-labeled acceptor** 100-fold in **1x BRD TR-FRET Assay Buffer 1**. Make only sufficient quantities needed for the assay; store remaining stock solution in aliquots at -20°C.

3) Add 5 µl of diluted **Tb-labeled donor**, and 5 µl of diluted **Dye-labeled acceptor** to each well designated "Test Inhibitor", "Negative Control", and "Positive Control".

4) Add 2 µl of inhibitor solution to each well designated "Test Inhibitor". Add 2 µl of the same solution without inhibitor (inhibitor buffer) to the wells labeled "Negative Control" and "Positive Control".

	Positive Control	Negative Control	Test Inhibitor
Tb-labeled donor	5 µl	5 µl	5 µl
Dye-labeled acceptor	5 µl	5 µl	5 µl
Test Inhibitor	–	–	2 µl
Inhibitor Buffer (no inhibitor)	2 µl	2 µl	–
BET Bromodomain Ligand	5 µl	–	5 µl
Non-acetylated Ligand 1	–	–	–
1x BRD9 Buffer	–	5 µl	–
BRD9 (1 ng/µl)	3 µl	3 µl	3 µl
Total	**20 µl**	**20 µl**	**20 µl**

***Non-acetylated Ligand 1** may be used as a substrate control in place of the negative control

5) Thaw **BET Bromodomain Ligand** and **Non-acetylated Ligand 1** on ice. Upon first thaw, briefly spin tube containing enzyme to recover the full contents of the tube. Aliquot each ligand into single-use aliquots. Store remaining undiluted ligand at −80°C immediately. *Note: each ligand is very sensitive to freeze/thaw cycles. Do not re-use thawed aliquots.*

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

6) Individually dilute **BET Bromodomain** 40-fold in **1x BRD TR-FRET Assay Buffer 1**. Add 5 µl of diluted **BET Bromodomain Ligand** to each well designated as "Positive Control" and "Test Inhibitor". Add 5 µl of **1x BRD TR-FRET Assay Buffer 1** to the wells labeled as "Negative Control". *Note: if using the **Non-acetylated Ligand 1**, dilute **Non-acetylated Ligand 1** 40-fold in **1x BRD TR-FRET Assay Buffer 1** and add 5 µl of diluted **Non-acetylated Ligand 1** to the "Negative Control" well in place of the 5 µl of **1x BRD TR-FRET Assay Buffer 1.***

7) Thaw **BRD9** bromodomain protein on ice. Upon first thaw, briefly spin tube containing protein to recover the full contents of the tube. Aliquot **BRD9** protein into single-use aliquots. Store remaining undiluted **BRD9** in aliquots at −80°C immediately. *Note: BRD9 is very sensitive to freeze/thaw cycles. Do not re-use thawed aliquots or diluted protein.*

8) Dilute **BRD9** in **1x BRD TR-FRET Assay Buffer 1** to 1 ng/µl (3 ng/reaction). Initiate reaction by adding 3 µl of diluted **BRD9** to wells designated for the "Positive Control", "Negative Control", and "Test Inhibitor". Discard any remaining diluted CeCR2 protein after use.

9) Incubate at room temperature for 2 hours.

10) Read the fluorescent intensity in a microtiter-plate reader capable of TR-FRET.

Instrument Settings

Reading Mode	Time Resolved
Excitation Wavelength	340±20 nm
Emission Wavelength	620±10 nm
Lag Time	60 µs
Integration Time	500 µs
Excitation Wavelength	340±20 nm
Emission Wavelength	665±10 nm
Lag Time	60 µs
Integration Time	500 µs

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

CALCULATING RESULTS:

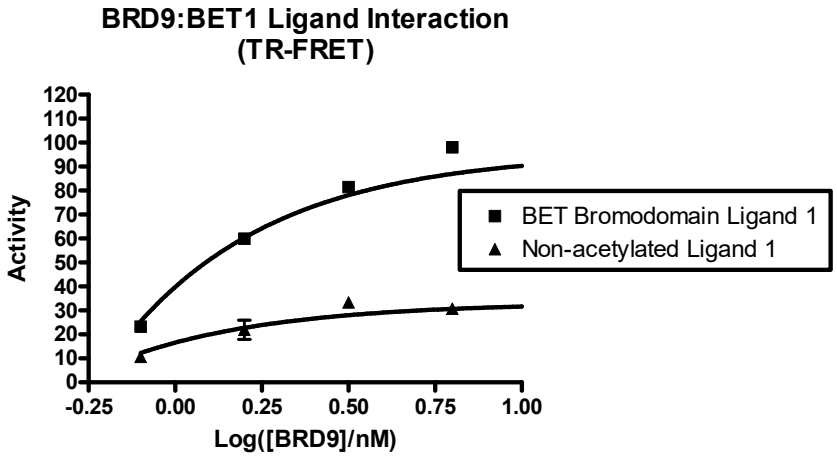
Two sequential measurements should be conducted. Tb-donor emission should be measured at 620 nm followed by dye-acceptor emission at 665 nm. Data analysis is performed using the TR-FRET ratio (665 nm emission/620 nm emission).

When percentage activity is calculated, the FRET value from the negative control can be set as zero percent activity and the FRET value from the positive control can be set as one hundred percent activity.

$$\%\,Activity = \frac{FRET_S - FRET_{neg}}{FRET_p - FRET_{neg}} \times 100\%$$

Where $FRET_s$ = Sample FRET, $FRET_{neg}$ = Negative control FRET, and $FRET_P$ = Positive control FRET.

EXAMPLE OF ASSAY RESULTS:



Specific interaction of BRD9 with acetylated vs. nonacetylated substrate using the *BRD9 TR-FRET Assay Kit, Catalog # 32621. Data shown is lot-specific. For lot-specific information, please contact BPS Bioscience, Inc. at info@bpsbioscience.com*

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

RELATED PRODUCTS:

Product Name	Catalog	Size
BET Bromodomain Ligand	33000	0.5 mL
Bromodomain Non-acetylated Ligand 1	33005	0.5 mL
BRD9 (135-242), GST-tag	31091	100 µg
BRD9 (135-242), His-tag	31090	100 µg
ATAD2A (981 – 1108), GST-tag	31121	100 µg
ATAD2B (953-1080), GST-tag	31125	100 µg
BRD1 (561 – 668), His-tag	31010	100 µg
BRPF1 (627-746), His-tag	31112	100 µg
BRPF3 (576-701), GST-tag	31130	100 µg
BRD9 Inhibitor Screening Kit	32519	384 rxns.
ATAD2A TR-FRET Kit	32618	384 rxns.
ATAD2B TR-FRET Kit	32620	384 rxns.
ATAD2A Inhibitor Screening Kit	32601	384 rxns.
ATAD2B Inhibitor Screening Kit	32605	384 rxns.
BRD1 Inhibitor Screening Kit	32521	384 rxns.
BRPF3 Inhibitor Screening Kit	32608	384 rxns.
(+)-JQ1 Inhibitor	27401	1 mg

Note: Tb-labeled donor and dye-labeled acceptor are products of Cisbio Bioassays.