



**BEST
SELLER**

bioauxilium

BETTER TOOLS. REAL DISCOVERIES.

THUNDER™ Phospho-STAT3 (Y705) TR-FRET Cell Signaling Assay Kit

[Visit product page](#)

PERFORMANCE, QUALITY & OUTSTANDING VALUE

The THUNDER™ Phospho-STAT3 (Y705) Assay Kit is becoming the cell-based assay of choice for drug discovery and research labs demanding reproducible and reliable results, batch-to-batch consistency, and affordability. Based on BioAuxilium's versatile and cost-effective TR-FRET technology and using a new antibody pair that significantly improves the assay performance, this highly validated assay kit provides a robust tool to measure low levels of endogenous phosphorylated STAT3 (Y705) protein in cell lysates.

Top reasons why scientists use THUNDER™ Phospho-STAT3 (Y705)

PERFORMANCE

Highest sensitivity and assay window; faster time-to-results

RELIABILITY

Rigorously validated on human and mouse cells

CONSISTENCY

Confirmed lot-to-lot consistency using relevant cell lysates

CONVENIENT

Compatible with all TR-FRET readers

AFFORDABLE

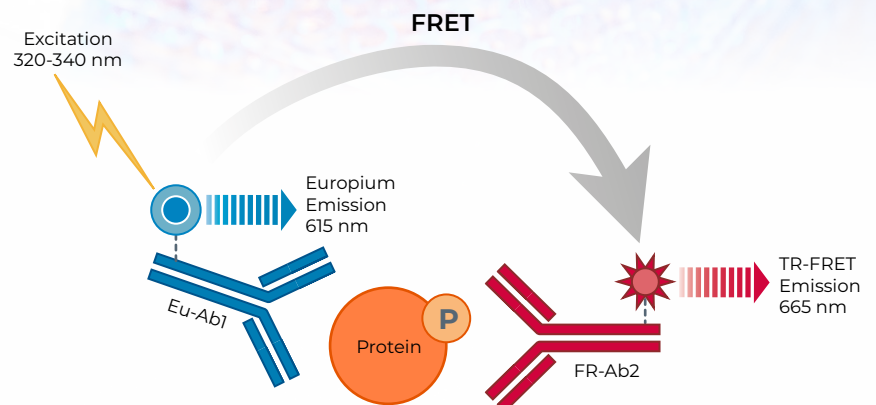
5 flexible kit formats and outstanding value

FAST DELIVERY

Always in stock for fast, worldwide delivery

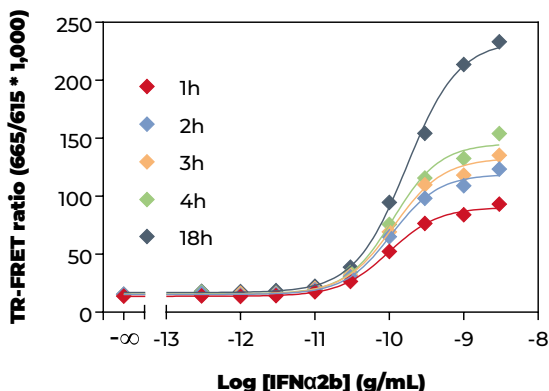
ASSAY PRINCIPLE

The binding of Europium-labeled and acceptor-labeled antibodies to distinct epitopes on STAT3 protein takes place in solution and brings the two dyes into close proximity. Excitation of the donor Europium chelate molecules with a flash lamp (320 or 340 nm) or a laser (337 nm) triggers a FRET from the donor to the acceptor molecules, which in turn emit a long-lived TR FRET signal at 665 nm. This signal is proportional to the concentration of Phospho-STAT3 (Y705) in the cell lysate.



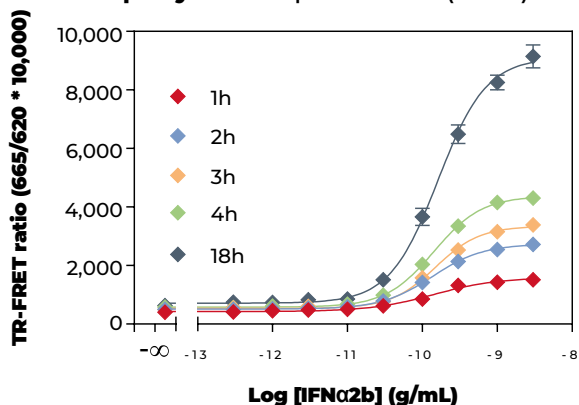
KIT BENCHMARKING

THUNDER™ Phospho-STAT3 (Y705)



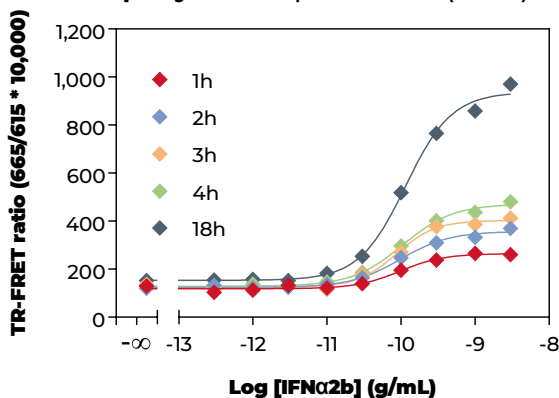
Time (h)	1	2	3	4	18
EC ₅₀ (nM)	0.10	0.11	0.11	0.11	0.17
S/B	6.7	8.1	9.1	10.3	15.0

Company A Phospho-STAT3 (Y705)



Time (h)	1	2	3	4	18
EC ₅₀ (nM)	0.14	0.14	0.15	0.14	0.16
S/B	3.8	5.4	6.8	7.4	14.6

Company B Phospho-STAT3 (Y705)



Time (h)	1	2	3	4	18
EC ₅₀ (nM)	0.10	0.10	0.09	0.11	0.11
S/B	2.0	2.1	3.0	3.6	6.4

Head-to-head data obtained with human HeLa cells show that the THUNDER™ Phospho-STAT3 (Y705) assay exhibits best-in-class performance. The THUNDER™ assay outperforms the other two commercially available TR-FRET assays in terms of signal-to-background ratios and requires shorter incubation times, while providing a comparable pharmacology.

KIT CONTENTS

Europium-labeled anti-phospho-STAT3
Acceptor-labeled anti-phospho-STAT3
STAT3 control lysate
5X Lysis Buffer 2
10X TR-FRET Detection buffer
100X Phosphatase Inhibitor Cocktail
Optimized and validated assay protocol

ORDERING INFORMATION

KIT SIZE*	Catalog No.
100 points	KIT-STAT3P-100
500 points	KIT-STAT3P-500
2,500 points	KIT-STAT3P-2500
5,000 points	KIT-STAT3P-5000
10,000 points	KIT-STAT3P-10000

* The number of assay points is based on an assay volume of 20 µL in low-volume 384-well assay plates. Bulk ordering and lot reservation are available on request, please contact us.



bioauxilium

TO PLACE AN ORDER: sales@bioauxilium.com

FOR MORE INFORMATION: info@bioauxilium.com

7171 Frederick-Banting Street, Montréal (Québec) H4S 1Z9 CANADA bioauxilium.com 1-866-610-6933 x 103

©2023 Bioauxilium Research, Inc. All rights reserved. THUNDER is a trademark of Bioauxilium Research, Inc.