

# Certificate of Analysis

## Z'-LYTE™ Kinase Assay Kit – Ser/Thr 23 Peptide, 1 Kit

**ThermoFisher**  
SCIENTIFIC

**Part Number:** PV4644  
**Lot Number:** 2466923  
**Immediate Storage:** -80°C  
**Shipping Conditions:** dry ice

5781 Van Allen Way  
Carlsbad, CA 92008  
Phone: 760.603.7200  
www.thermofisher.com

### Components:

Description	Composition	Quantity	Part Number	Lot Number
Z'-LYTE™ Ser/Thr 23 Peptide	1 mM in DMSO. Proprietary synthetic peptide. The synthetic peptide is related to the PKC epsilon pseudosubstrate derived peptide (MRPRKRQGSVRRRV).	20 µL	PV4645	1773742A
Z'-LYTE™ Ser/Thr 23 Phospho-peptide	1 mM in DMSO	10 µL	PV4646	2150525A
5X Kinase Buffer A	250 mM HEPES (pH 7.5), 50 mM MgCl <sub>2</sub> , 5 mM EGTA, and 0.05% Brij-35	4 mL	PV3189	2104486N
ATP	10 mM ATP in water	500 µL	PV3227	2325684E
Development Reagent A	Proprietary Reagent. See lot specific COA for Development Reagent A dilution conditions.	50 µL	PV3295*	2000963G
Development Buffer	Proprietary Buffer (identical composition to former Development Buffer B)	5 mL	P3127	2310063B
Stop Reagent	Proprietary Reagent	5 mL	P3094	2334826A

\*See individual COA

**Storage and Handling:** The performance of this product is guaranteed for 6 months from the date of purchase if stored and handled properly.

Description	Storage and Handling
Z'-LYTE™ Ser/Thr 23 Peptide	-20°C. <b>Vortex prior to each use.</b>
Z'-LYTE™ Ser/Thr 23 Phospho-peptide	-20°C. <b>Vortex prior to each use.</b>
5X Kinase Buffer A	20-30°C
ATP	-20°C. Minimize freeze/thaw cycles.
Development Reagent A	-80°C. Avoid more than 5 freeze/thaw cycles, aliquot if necessary.
Development Buffer	20-30°C
Stop Reagent	-80°C. Avoid more than 5 freeze/thaw cycles, aliquot if necessary.

### Functional Testing:

Kit components are functionally tested for performance in the assay.

### Notes:

For kinase specific conditions go to [www.lifetech.com/kinaseprofiling](http://www.lifetech.com/kinaseprofiling). Scroll down and select the Technology Overview tab and look for the Z'-LYTE® Protocol and Assay Conditions.

## Special Note to Customers

The Stop Reagent provided in this kit has been reformulated to provide maximum assay performance. The new formulation has resulted in a transparent yellow solution. The Stop Reagent has been thoroughly validated with all kit components you received to ensure compatibility. If you have any questions or concerns about the new formulation, please contact our Technical Support Team at:

**North America: 800-955-6288 or INTL: 760-603-7200 Select option 3, ext. 40266**  
**Email: [drugdiscoverytech@invitrogen.com](mailto:drugdiscoverytech@invitrogen.com)**

## Certificate of Analysis

**Part Number:** PV4644, Lot Number: 2466923

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## Development Reagent A, 50 µL

**ThermoFisher**  
SCIENTIFIC

**Part Number:** PV3295  
**Lot Number:** 2000963G  
**Immediate Storage:** -80 °C  
**Shipping Conditions:** dry ice

5781 Van Allen Way  
Carlsbad, CA 92008  
Phone: 760.603.7200  
www.thermofisher.com

**Description:** Proprietary Reagent.

**Storage and Handling:**

Store at -80 °C. Avoid more than 5 freeze thaw cycles, prepare aliquots if necessary. The performance of this product is guaranteed for six months from the date of purchase if stored and handled properly.

**Note:** Many kits require an intermediate dilution of Development Reagent A or Development Reagent B at either a 1:10, 1:100 or even 1:1,000. **This is an example only for Development Reagent A, please refer to the information below for your reagent and lot.** The Ser/Thr 7 kit often requires a 1:32,768 dilution of Development Reagent A. To prepare this dilution an intermediate dilution of 1:100 of Development Reagent A is prepared by taking 2 µL of Development Reagent A and mixing it with 198 µL of Development Buffer. Then 6.7 µL of the diluted reagent is mixed with 2,189.3 µL of Development Buffer for a final dilution of 1:32,768. Intermediate dilutions are noted in parentheses in the Amount of Development Reagent column.

Kit	Dilution	Amount of Development Buffer	Amount of Development Reagent
Z'-LYTE® Kinase Assay Kit-Ser/Thr 1 Peptide	1:4096	2194.6 µL	5.4 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 3 Peptide	1:2048	2189.3 µL	10.7 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 4 Peptide	1:2048	2189.3 µL	10.7 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 6 Peptide	1:4096	2194.6 µL	5.4 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 7 Peptide	1:131072	2183.3 µL	16.7 µL (1:1000 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 9 Peptide	1:128	2182.8 µL	17.2 µL
Z'-LYTE® Kinase Assay Kit-Ser/Thr 12 Peptide	1:8192	2173.1 µL	26.9 µL (1:100 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 13 Peptide	1:1024	2178.5 µL	21.5 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 14 Peptide	1:512	2157.0 µL	43.0 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 17 Peptide	1:512	2157.0 µL	43.0 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 18 Peptide	1:4096	2194.6 µL	5.4 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 19 Peptide	1:512	2157.0 µL	43.0 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 20 Peptide	1:512	2157.0 µL	43.0 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 21 Peptide	1:4096	2194.6 µL	5.4 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 22 Peptide	1:16384	2186.6 µL	13.4 µL (1:100 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 23 Peptide	1:4096	2194.6 µL	5.4 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 24 Peptide	1:65536	2166.4 µL	33.6 µL (1:1000 dilution)
Z'-LYTE® Kinase Assay Kit-Ser/Thr 25 Peptide	1:4096	2194.6 µL	5.4 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Tyr 2 Peptide	1:256	2191.4 µL	8.6 µL
Z'-LYTE® Kinase Assay Kit-Tyr 3 Peptide	1:2048	2189.3 µL	10.7 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Tyr 5 Peptide	1:1024	2178.5 µL	21.5 µL (1:10 dilution)
Z'-LYTE® Kinase Assay Kit-Tyr 6 Peptide	1:128	2182.8 µL	17.2 µL

For questions, please contact our Technical Support Team

N. Am Ph#: 800-955-6288 ext. 40266 Email: drugdiscoverytech@thermofisher.com

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Part Number: PV3295, Lot Number: 2000963G



Anita Targosz, Associate Director

Date: 15/Oct/2018

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