MSD® Phospho(Tyr721)/Total c-Kit Assay Whole Cell Lysate Kit

For quantitative determination in human whole cell lysate samples



Alzheimer's Disease BioProcess Cardiac

Cell Signaling

Clinical Immunology Cytokines Hypoxia Immunogenicity Inflammation Metabolic Oncology Toxicology Vascular

Catalog Numbers

| Phospho (Tyr721)/Total c-Kit Whole Cell Lysate Kit | | | | | |
|---|-----------|--|--|--|--|
| Kit size | | | | | |
| 1 plate | K15119D-1 | | | | |
| 5 plates | K15119D-2 | | | | |
| 20 plates | K15119D-3 | | | | |

| Phospho-c-Kit (Tyr721) Whole Cell Lysate Set | | | | | |
|---|---------|--|--|--|--|
| 200 μ g | C11DP-1 | | | | |

Ordering information

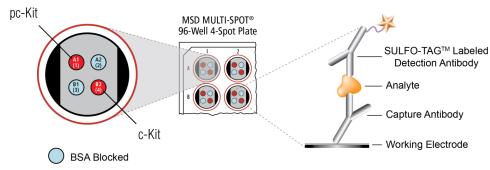
MSD Customer Service Phone: 1-301-947-2085 Fax: 1-301-990-2776 Email: CustomerService@ mesoscale.com

Company Address

MESO SCALE DISCOVERY® A division of Meso Scale Diagnostics, LLC. 9238 Gaither Road Gaithersburg, MD 20877 USA

www.mesoscale.com®

For Research Use Only. Not for use in diagnostic procedures.



The MSD Phospho(Tyr721)/Total c-Kit Assay is available on 96-well 4-Spot plates. This datasheet outlines the performance of the assay.

Typical Data

Representative results for the Phospho(Tyr721)/Total c-Kit are illustrated below. The signal and ratio values provided below are example data; individual results may vary depending upon the samples tested. Western blot analyses of each lysate type were performed with phospho-c-Kit and total c-Kit antibodies and are shown below for comparison. Growing M07e cells were starved in low serum for 30 minutes (negative) and treated with SCF (100 ng/mL; 2 minutes) (positive). Whole cell lysates were added to MSD MULTI-SPOT® 4-Spot plates coated with anti-phospho-c-Kit (Tyr721) and anti-total c-Kit antibodies on spatially distinct electrodes within a well. Phosphorylated and total c-Kit were detected with anti-total c-Kit antibody conjugated with MSD SULFO TAG™ reagent.

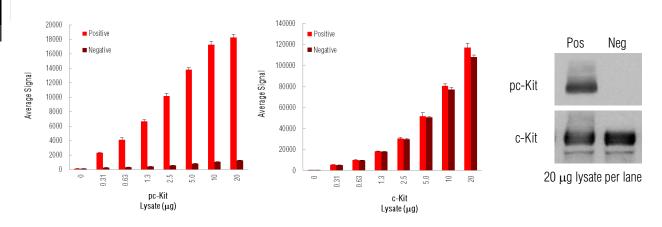


Fig. 1: Sample data generated with MULTI-SPOT Phospho(Tyr721)/Total c-Kit Assay. Increased signal for phosphorylated c-Kit was observed with pc-Kit positive cell lysate. Total c-Kit signal increased throughout the titration of both pc-Kit positive and negative cell lysates. The Phospho(Tyr721)/Total c-Kit Assay provides a quantitative measure of the data obtained with the traditional Western blot.





MSD Phosphoprotein Assays

Lysate Titration

Data for positive and negative M07e cell lysates using the MULTI-SPOT Phospho(Tyr721)/Total c-Kit are presented below.

| | Lysate | Positive | | | Negative | | | D/M |
|--------|--------|----------------|--------|-----|----------------|--------|-----|-----|
| | (µg) | Average Signal | StdDev | %CV | Average Signal | StdDev | %CV | P/N |
| pc-Kit | 0 | 122 | 6 | 4.9 | 127 | 5 | 3.9 | |
| | 0.31 | 2305 | 57 | 2.5 | 273 | 14 | 5.1 | 8.4 |
| | 0.63 | 4142 | 231 | 5.6 | 328 | 19 | 5.8 | 13 |
| | 1.3 | 6687 | 185 | 2.8 | 427 | 7 | 1.6 | 16 |
| | 2.5 | 10190 | 374 | 3.7 | 585 | 6 | 1.0 | 17 |
| | 5.0 | 13805 | 279 | 2.0 | 796 | 30 | 3.8 | 17 |
| | 10 | 17283 | 404 | 2.3 | 1057 | 30 | 2.8 | 16 |
| | 20 | 18255 | 459 | 2.5 | 1271 | 40 | 3.1 | 14 |
| c-Kit | 0 | 261 | 16 | 6.1 | 253 | 8 | 3.2 | |
| | 0.31 | 5444 | 181 | 3.3 | 5118 | 182 | 3.6 | 1.1 |
| | 0.63 | 9861 | 493 | 5.0 | 9444 | 126 | 1.3 | 1.0 |
| | 1.3 | 18141 | 239 | 1.3 | 17734 | 347 | 2.0 | 1.0 |
| | 2.5 | 30290 | 1031 | 3.4 | 29691 | 544 | 1.8 | 1.0 |
| | 5.0 | 51427 | 3304 | 6.4 | 50380 | 697 | 1.4 | 1.0 |
| | 10 | 80241 | 2254 | 2.8 | 76996 | 2008 | 2.6 | 1.0 |
| | 20 | 117036 | 3707 | 3.2 | 107852 | 2036 | 1.9 | 1.1 |

MSD Advantage

- **Multiplexing:** Multiple analytes can be measured in one well using typical sample amounts of 25 μ g/well or less without compromising speed or performance
- Large dynamic range: Linear range of up to five logs enables the measurement of native levels of biomarkers in normal and diseased samples without multiple dilutions
- Minimal background: The stimulation mechanism (electricity) is decoupled from the signal (light)
- > Simple protocols: Only labels near the electrode surface are detected, enabling no-wash assays
- > Flexibility: Labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- High sensitivity and precision: Multiple excitation cycles of each label enhance light levels and improve sensitivity

For a complete list of products, please visit our website at www.mesoscale.com

MESO SCALE DISCOVERY, MESO SCALE DIAGNOSTICS, WWW.MESOSCALE.COM, MSD, MSD (DESIGN), DISCOVERY WORKBENCH, QUICKPLEX, MULTI-ARRAY, MULTI-SPOT, SULFO-TAG, SECTOR, SECTOR, HTS, SECTOR PR, 4-SPOT (DESIGN) and SPOT THE DIFFERENCE are trademarks and/or service marks of Meso Scale Diagnostics, LLC.

For Research Use Only. Not for use in diagnostic procedures.

