







# LYSIS BUFFER COMPATIBILITY

JULY 2022

## Cell Signaling: Biomarkers, Phospho- & total-protein assays







|                              | 64KL1FDF | 64KL2FDF | 64KL3FDF | 64KL4FDF | 64KL5FDF |
|------------------------------|----------|----------|----------|----------|----------|
| Alpha-SMA                    | X        | ○        | LB       | X        | ○        |
| Alpha-Synuclein phospho-S129 | ●        | ●        | ●        | ●        | LB       |
| Alpha-Synuclein total        | ●        | ●        | ●        | ●        | LB       |
| Alpha-Tubulin Housekeeping   | ●        | ●        | ●        | LB       | ○        |
| 4EBP1 phospho-T37/46         | LB       | ○        | ○        | ○        | ○        |
| ACC phospho-S79              | ●        | ○        | X        | LB       | ○        |
| ACC total                    | X        | X        | ●        | LB       | ○        |
| AKT1 phospho-S473            | LB       | ●        | ○        | ○        | ○        |
| AKT1 total                   | LB       | ●        | ○        | ○        | ○        |
| AKT2 phospho-S473            | LB       | ●        | ○        | ○        | ○        |

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-  High performance
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|-------------------------------------|----------|----------|----------|----------|----------|
| AKT2 total                          |          | ●        | ○        | ○        | ○        |
| AKT3 phospho-S473                   |          | ●        | ○        | ○        | ○        |
| AKT3 total                          |          | ●        | ○        | ○        | ○        |
| AKT phospho-S473 & AKT phospho-T308 |          | ○        | ●        | ●        | ○        |
| AKT total                           |          | ○        | ○        | ●        | ○        |
| AMPK phospho-T172                   |          | ○        | ○        | ●        | ○        |
| AMPK total                          |          | ○        | ○        | ●        | ○        |
| Androgen receptor total             | ●        | ●        |          | ●        | ○        |
| AP2 total                           | ●        | ●        | ●        |          | ○        |
| ATF2 phospho-T71                    |          | ●        | X        | X        | ○        |
| ATM phospho-S1981 <b>NEW</b>        |          | ●        | ○        | ●        | ○        |
| ATM total <b>NEW</b>                |          | ●        | ○        | ●        | ○        |
| BAD phospho-S112                    | ●        | ○        |          | ○        | ○        |
| B-arrestin 1 total                  | ●        | ●        | ●        |          | ○        |
| B-arrestin 2 total                  | ●        | ●        | ●        |          | ○        |
| Beta Catenin phospho-T41/S33/37     | ○        | ○        |          | ●        | ○        |
| Beta Catenin total                  | ○        | ○        |          | ●        | ○        |
| BRD2 total                          | ●        | ●        | ●        |          | ○        |
| BRD3 total                          | ●        | ●        | ●        |          | ○        |
| BRD4 total                          | ●        | ●        | ●        |          | ○        |
| BRD7 total                          | ●        | X        | X        |          | ○        |

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|--------------------|----------|----------|----------|----------|----------|
| BRD9 total         | ●        | ●        | ●        | LB       | ○        |
| BTK phospho-Y223   | LB       | ○        | ○        | ●        | ○        |
| BTK total          | LB       | ○        | ○        | ●        | ○        |
| Cereblon total     | ●        | ●        | ●        | LB       | ○        |
| CDK1 total         | LB       | ●        | ●        | ●        | ○        |
| CDK2 phospho-Y15   | ●        | LB       | ●        | ●        | ○        |
| CDK2 total         | X        | LB       | ●        | ●        | ○        |
| CDK4 total         | LB       | X        | X        | ●        | ○        |
| CDK6 total         | LB       | X        | X        | ●        | ○        |
| CDK7 total         | LB       | ●        | ●        | ●        | ○        |
| CDK9 total         | LB       | ●        | X        | ●        | ○        |
| CDK12 total        | ●        | LB       | ●        | ●        | ○        |
| CHK1 phospho-S345  | LB       | ●        | ●        | ●        | ○        |
| CHK1 total         | LB       | ●        | ●        | ●        | ○        |
| CHK2 phospho-T68   | LB       | ●        | ●        | ●        | ○        |
| CHK2 total         | LB       | ●        | ●        | ●        | ○        |
| c-Jun phospho-S63  | LB       | ○        | X        | ●        | ○        |
| c-RAF phospho-S338 |          | LB       | ○        | ●        | ○        |
| cRaf phospho-S43   | ●        | ●        | ○        | ○        | ○        |
| cRaf total         | ●        | ●        | ○        | ○        | ○        |
| CREB phospho-S133  | LB       | ○        | ●        | X        | ○        |

















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| CREB total                     |          | ○        | ○        | ●        | ○        |
| Cyclin D1 phospho-T286         |          | X        | X        | ●        | ○        |
| Cyclin D1 total                |          | ●        | ●        | ●        | ○        |
| EGFR phospho-pan               | ○        | ○        | ●        |          | ○        |
| EGFR phospho-Y1068             | X        | ○        | ●        |          | ○        |
| EGFR total                     | ○        | ○        | ●        |          | ○        |
| EIF2 $\alpha$ phospho-S52      | ●        | ○        | ○        |          | ○        |
| EIF2 $\alpha$ total            | ●        | ○        | ○        |          | ○        |
| EIF4E phospho-S209             |          | ○        | X        | ○        | ○        |
| eNOS phospho-S1177             | ●        | ●        |          | ●        | ○        |
| eNOS total                     | ●        | ●        |          | ●        | ○        |
| ER $\alpha$ total              | ●        | ●        | ●        |          | ○        |
| Advanced ERK phospho-T202/Y204 |          | ○        | X        | ●        | ○        |
| ERK phospho-T202/Y204          |          | ○        | X        | ●        | ○        |
| ERK total                      |          | ○        | X        | ●        | ○        |
| FAK phospho-Y397               | X        | ●        |          | X        | ○        |
| FAK total                      | ●        | ●        |          | ●        | ○        |
| FGFR1 phospho Y653/654         | X        | X        | X        |          | ○        |
| FGFR1 total                    | ●        | ●        | ●        |          | ○        |
| FGFR2 phospho-Y653/654         | X        | ●        | ●        |          | ○        |
| FGFR2 total                    | ●        | ●        | ●        |          | ○        |

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| FGFR3 phospho Y653/654  | X        | ●        | X        | LB       | ○        |
| FGFR3 total             | ●        | ●        | X        | LB       | ○        |
| FGFR4 phospho Y642      | X        | ●        | ●        | LB       | ○        |
| FGFR4 total             | X        | ●        | ●        | LB       | ○        |
| Fibronectin             | ●        | ●        | LB       | ●        | ○        |
| Fibronectin EDA         | ●        | ●        | LB       | ●        | ○        |
| FoxO1 phospho-S256      | LB       | ○        | X        | ●        | ○        |
| FoxO1 total             | LB       | ○        | X        | ●        | ○        |
| GAPDH Housekeeping      | LB       | ●        | ●        | ●        | ○        |
| GSK3 alpha phospho-S21  | ●        | ○        | ●        | LB       | ○        |
| GSK3 alpha total        | ●        | ○        | ●        | LB       | ○        |
| GSK3 beta phospho-S9    | ●        | ○        | ●        | LB       | ○        |
| GSK3 beta total         | ●        | ○        | ●        | LB       | ○        |
| H2AX phospho-S139       | ●        | ○        | ○        | LB       | ○        |
| HER2 phospho-Y1221/1222 | X        | ○        | ●        | LB       | ○        |
| HER2 total              | ○        | ○        | ●        | LB       | ○        |
| HER3 phospho-Y1289      | ●        | ○        | ○        | LB       | ○        |
| HER3 total              | ○        | ○        | ○        | LB       | ○        |
| HIF-1 alpha             | ●        | ○        | ●        | LB       | ○        |
| Histone H3 phospho-T4   | LB       | ○        | ○        | ○        | ○        |
| Histone H3 phospho-S10  | LB       | ○        | ○        | ○        | ○        |

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|--------------------------------------|---|---|---|---|----------|
| Histone H3 total                     |    | ○   | X   | ○   | ○        |
| Insulin receptor phospho-Y1150/1151  |    | ●   | ○   | ○   | ○        |
| Insulin receptor total               |    | ●   | ○   | ○   | ○        |
| IRAK3 total                          |    | ●   | ●   | ●   | ●        |
| IRAK4 total                          |    | ●   | ●   | ●   | ●        |
| IRF3 phospho-S386                    | X   |  | ●   | X   | ○        |
| IRF5                                 | ●   |  | ○   | ○   | ○        |
| IRβ phospho Y1150/1151               |    | ●   | ●   | ●   | ○        |
| IRβ total                            |    | ●   | ●   | ●   | ○        |
| IRS1 phospho-S307 mouse / S312 human |    | ○   | ○   | ●   | ○        |
| IRS1 total                           |    | ○   | ○   | ●   | ○        |
| IRS2 total                           |    | ○   | ○   | ●   | ○        |
| IKKB phospho-S177/181                |    | ○   | X   | ●   | ○        |
| IKKB total                           |    | ●   | ●   | ●   | ○        |
| JAK1 Phospho Y1034/35                | X   | ●   | ●   |  | ○        |
| JAK1 total                           | ●   | ●   | ●   |  | ○        |
| JAK2 Phospho Y1007/08                |  | ●   | ●   | ●   | ○        |
| JAK2 total                           |  | ●   | ●   | ●   | ○        |
| JAK3 total                           | ●   | ●   | ●   |  | ○        |
| JNK phospho-T183/Y185                | X   | ○   |  | ○   | ○        |
| Ki-67                                | ●   | ●   | X   |  | ○        |

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|-------------------------|----------|----------|----------|----------|----------|
| LRRK2 phospho-S9358     | X        | X        | X        | LB       | ○        |
| LRRK2 total             | X        | X        | X        | LB       | ○        |
| MDA5 total              | ●        | ●        | LB       | ●        | ○        |
| MDA5 aggregation        | X        | X        | LB       | X        | ○        |
| MEK1 phospho-S298       | ●        | LB       | ●        | ●        | ●        |
| MEK1 phospho-S218/222   | LB       | ○        | ○        | ○        | ○        |
| MEK1 total              | LB       | ○        | ○        | ○        | ○        |
| MEK1/2 phospho-S218/222 | LB       | ○        | ●        | ○        | ○        |
| MKK4 phospho-S257       | LB       | ●        | ●        | ●        | ○        |
| MKK4 total              | LB       | ●        | ●        | ●        | ○        |
| MLKL phospho-S358       | ●        | ●        | ●        | LB       | ○        |
| MLKL total              | ●        | ●        | ●        | LB       | ○        |
| MNK phospho-T197/202    | LB       | X        | ○        | ○        | ○        |
| mTOR phospho-S2448      | LB       | ○        | ●        | ●        | ○        |
| NDRG1 phospho-T346      | ○        | ○        | ○        | LB       | ○        |
| NDRG1 phospho-S330      | ○        | ○        | ○        | LB       | ○        |
| NDRG1 total             | ○        | ○        | ○        | LB       | ○        |
| NFκB phospho-S536       | ○        | ○        | ●        | LB       | ○        |
| NFκB total              | ○        | ○        | ●        | LB       | ○        |
| P21                     | ●        | LB       | ○        | ○        | ○        |
| P38 phospho-T180/Y182   | LB       | ○        | X        | X        | ○        |







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|---------------------------|----------|----------|----------|----------|----------|
| P53 phospho-S15           | LB       | ○        | X        | X        | ○        |
| P53 total                 | LB       | ○        | X        | X        | ○        |
| P62/SQSTM1-S403           | ●        | ●        | ●        | LB       | ○        |
| P62/SQSTM1 total          | ●        | ●        | ●        | LB       | ○        |
| p70S6K phospho-T389       | LB       | ○        | ●        | ○        | ○        |
| PDGFRβ phospho-Y751       | ●        | ●        | ●        | LB       | ○        |
| PLCg1 phospho-Y1217       | X        | X        | LB       | X        | ○        |
| PLCg1 total               | ●        | ●        | LB       | ●        | ○        |
| PLCg2 phospho-Y1217       | ●        | ●        | ●        | LB       | ○        |
| PLCg2 total               | ●        | X        | X        | LB       | ○        |
| Phospholamban phospho-S16 | ●        | ●        | LB       | ●        | ○        |
| Phospholamban total       | ●        | ●        | LB       | ●        | ○        |
| PR total <b>NEW</b>       | ●        | ●        | ●        | LB       | ○        |
| RB phospho-S780           | ●        | LB       | ●        | ●        | ○        |
| RB phospho-S807/811       | ●        | LB       | ●        | ●        | ○        |
| RB total                  | ●        | LB       | ●        | ●        | ○        |
| RET phospho-pan Y         | ●        | ●        | ●        | LB       | ○        |
| RET total                 | ●        | ●        | ●        | LB       | ○        |
| RIPK1 phospho-S166        | LB       | ●        | ●        | ●        | ○        |
| RIPK1 total               | LB       | ●        | ●        | ●        | ○        |
| RSK1 phospho-S380         | X        | LB       | ○        | X        | ●        |

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| RSK1 phospho-T359/S363   | ●        | LB ○     | ○        | ○        | ○        |
| RSK1 total               | X        | LB ○     | ○        | ○        | ○        |
| S6RP phospho-S235/236    | LB ○     | ○        | ●        | ●        | ○        |
| SARS-CoV-2 capsid        | ●        | ●        | ●        | ●        | LB ○     |
| SHP1 phospho-Y564        | X        | X        | ●        | LB ○     | ○        |
| SHP1 total               | X        | ●        | ●        | LB ○     | ○        |
| SHP2 phospho-Y542        | X        | LB ○     | ●        | X        | ○        |
| SHP2 total               | X        | LB ○     | ●        | X        | ○        |
| SLP76 phospho-S376       | LB ○     | ○        | ○        | ●        | ○        |
| SLP76 phospho-Y145       | X        | ●        | ●        | LB ○     | ○        |
| SLP76 total              | LB ○     | ●        | ●        | ●        | ○        |
| SLP76 phospho-S376 mouse | LB ○     | ●        | ●        | ●        | ○        |
| SLP76 total mouse        | LB ○     | ●        | ○        | ○        | ○        |
| SMAD1 phospho-S463/465   | ●        | ○        | ○        | LB ○     | ○        |
| SMAD1 total              | ●        | ○        | ○        | LB ○     | ○        |
| SMAD2 phospho-S465/467   | ●        | X        | ●        | LB ○     | ○        |
| SMAD2 total              | ●        | ●        | ●        | LB ○     | ○        |
| SMAD3 phospho-S463/465   | ●        | ○        | ●        | LB ○     | ○        |
| SMAD3 total              | ●        | ○        | ●        | LB ○     | ○        |
| SMAD4 phospho-T277       | ●        | ●        | ●        | LB ○     | ●        |
| SMAD4 total              | ●        | ●        | ●        | LB ○     | ●        |

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| Spike S1 protein       | ●        | ○        | ○        | ●        | LB       |
| c-Src phospho-Y419     | X        | ○        | LB       | ●        | ○        |
| c-Src total            | ●        | ○        | LB       | ●        | ○        |
| STAT1 phospho-Y701     | ●        | LB       | ●        | ●        | ○        |
| STAT1 total            | ●        | LB       | ●        | ●        | ○        |
| STAT3 phospho-Y705     | LB       | ○        | ●        | ●        | ○        |
| STAT3 total            | LB       | ○        | ○        | ○        | ○        |
| STAT5 phospho-Y694     | ●        | ○        | X        | LB       | ○        |
| STAT6 phospho-Y641     | X        | X        | ●        | LB       | ○        |
| STAT6 total <b>NEW</b> | ●        | ●        | ●        | LB       | ○        |
| STING phospho-S366     | ●        | ●        | ●        | LB       | ○        |
| STING total            | ●        | ●        | ●        | LB       | ○        |
| STING (m) phospho-S365 | X        | X        | ●        | LB       | ○        |
| STING (m) Total        | ●        | ●        | ●        | LB       | ○        |
| SYK phospho-Y525       | ●        | ●        | LB       | ●        | ○        |
| SYK total              | ●        | ●        | LB       | ●        | ○        |
| TAU phospho-S202/T205  | LB       | ●        | ●        | ●        | ○        |
| TAU phospho-S356       | LB       | ●        | ●        | ●        | ○        |
| TAU phospho-S404       | LB       | X        | ●        | ●        | ○        |
| TAU phospho-S422       | LB       | X        | ●        | ●        | ○        |
| TAU phospho-T181       | LB       | ●        | ●        | ●        | ○        |

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| TAU total                            |          | ●        | ●        | ●        | ○        |
| TBK1 phospho-S172                    | ●        | X        | X        |          | ○        |
| TBK1 total                           | ●        | X        | X        |          | ○        |
| TDP43 aggregated                     |          | ●        | ●        | ●        | ○        |
| Tie2 phospho-Y992                    |          | X        | X        | ●        | ●        |
| TOM20                                | ●        | ●        | X        |          | ○        |
| TYK2 phospho-Y1054/55                | X        | X        | ●        |          | ○        |
| TYK2 total                           | ●        | ●        | ●        |          | ○        |
| Ubiquitin phospho-S65                |          | X        | ●        | ●        | ○        |
| ULK1 phospho-S757 mouse / S758 human |          | ○        | ●        | ●        | ○        |
| VASP phospho-S157                    | ●        |          | ●        | ●        | ○        |
| VASP phospho-S239                    | ●        |          | ●        | ●        | ○        |
| VASP total                           | ●        |          | ●        | ●        | ○        |
| VEGFR2 phospho-Y1175                 | ●        |          | ●        | ●        | ○        |
| VEGFR2 total                         | ●        |          | X        | ●        | ○        |
| YAP phospho-S127                     | ●        | ○        | X        |          | ○        |
| ZAP-70 phospho-Y319                  | ●        | ○        | ●        |          | ○        |
| ZAP-70 total                         | ●        | ○        | ●        |          | ○        |

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