ar@ell TK 210 Cell Culture Protocol – For research use only. Not for use in diagnostics procedures

Note: Calibration curve and quantification should be carried out as described in the user manual.

Cell Extraction Buffer: 50 mM Tris-HCl, pH = 8.0, 150 mM NaCl, 0.5% NP-40 with 0.1% SDS

1. Spin down the plate 5 min @ 2000 xG

Cell Supernatant

- 2. Transfer 120 µL supernatant to an uncoated microtiter plate
- 3. Add 80 μ L sample dilution buffer (V_f=200 μ L), briefly mix on orbital shaker
- 4. Seal and incubate the plate 60 min @ RT
- 5. Prewash the wells of the coated microtiter plate 4 times with 350 μ L wash buffer.
- 6. Within 10 minutes of completing the above wash, transfer 150 $\,\mu$ L to prewashed coated microtiter plate
- 7. Continue with "Joint Detection Protocol"

Cell Pellet/Cell Extract

- 2. Add 200 μ L prechilled (4°C) wash buffer and spin 5 min @ 2000 xG
- 3. Remove wash buffer
- 4. Lyse cells with 120 μL cell extraction buffer
- 5. Transfer 80 µL sample to uncoated microtiter plate
- 6. Add 80 μ L sample dilution buffer (V_f=160 μ)
- 7. Seal and incubate the plate 60 min @ RT
- 8. Prewash the wells of the coated microtiter plate 4 times with 350 μ L wash buffer.
- 9. Within 10 minutes of completing the above wash, transfer 100 $\,\mu$ L to prewashed coated microtiter plate
- 10. Continue with "Joint Detection Protocol"

Joint Detection Protocol

- a. Cover and seal. Incubate 2 hours @ RT w/ intermediate shaking
- b. Wash 4 times with 350 μL wash buffer
- c. Add 100 µL Biotinylated anti TK1 to each well
- d. Cover and seal. Incubate 1 hour @ RT w/ intermediate shaking
- e. Wash 4 times with 350 µL wash buffer
- f. Add 100 µL streptavidin-HRP conjugate
- g. Cover and seal. Incubate 30 minutes @ RT w/ intermediate shaking
- h. Wash 4 times with 350 μL wash buffer
- i. Add 100 µL TMB substrate to each well. Incubate 15 minutes @ RT in the dark with no rotation
- j. Add 100 µL Stop solution. Ensure complete mixing
- k. Read within 15 minutes @ 450 nm.