MNPROtein™ RT-QuIC Kit

An ultra-sensitive kit for detection of prion disorders.

MNPROtein™ 0.75 mg/mL
Syrian hamster recPrP^{C}(90-231)

For product details, visit www.priogen.store/products/quic-kits

QuIC Buffer A: -80°C to -20°C
MNPROtein™: -80°C to -20°C
Shelf life: 1 year

Components included in kit

- 3 tubes of MNPROtein™
- 1 tube QuIC Buffer A

Components NOT included in kit

- diH_2O
- 10X Sample Dilution Buffer
  - Can be purchased separately
- 10% tissue homogenate in 1X PBS

Notes

- Immediately transfer MNPROtein™ to -80°C – -20°C upon receipt. Thaw at room temperature just before use. Do **NOT** vortex MNPROtein™. Mix by inversion only.
- Upon thawing Buffer A, vortex vigorously until the precipitate disappears.
- Do **NOT** vortex the reaction mix once the MNPROtein™ has been added.
- Optimization/Troubleshooting:
  - **Temperature:** higher temperature will increase the reaction rate but can reduce specificity.
  - If you encounter inconsistent results, we recommend pre-filtering the MNPROein™ at 3000 x g for 15 minutes with Pall Nanosep Centrifugal Devices with Omega™ Membrane 100K (NC0388807).

★ Product performance is not guaranteed if recommendations are not followed or RT-QuIC parameters are outside scientific community standards.

Protocol for a full 96-well plate (half 384-well plate)

1. In a 10 mL tube, pipette the reagents **in order** and vortex:
    a. 7207 µL of diH_2O
    b. 1460 µL of QuIC Buffer A
    ★ Total volume will equal ~8.7 mL.
2. Add 1333 µL of MNPROtein™ to the same 10 mL tube and mix gently by inversion.
    ★ Total volume will equal 10 mL.
3. Pipette 98 µL (49 µL for 384 well) of reaction mix to each plate well.
4. Tissue homogenates (10% [w:v] in 1X PBS) must be diluted in 1X Sample Dilution Buffer (available for separate purchase at 10X concentration) prior to addition to the reaction.
    a. We recommend that 10% (w:v) lymph tissue homogenates be diluted at least 10-fold.
        - 10 µL homogenate + 90 µL 1X Sample Dilution Buffer.
    b. We recommend that 10% (w:v) brain homogenates be diluted at least 100-fold.
5. Pipette 2 µL (1 µL for 384 well) of the diluted sample to each well.
6. Seal the plate before running the assay.