

LentiTitre™ Cassette for Rapid Titration of Lentivirus

LentiTitre™ Cassette (Cat. No: ATG-LT-02) is a multi-lane lentivirus titration kit for rapid and semi-quantitative estimation of the functional lentivirus titres in less than 10 minutes. It is a lateral flow immunoassay (LFIA) based titration device, based on p24 detection with sensitive gold-conjugated antibody. Lentiviral supernatant standards (LSS) functionally titrated at 10^6 TU/mL are included in the kit. By comparing the intensities of the test lines of the standards and that of unknown sample, the cassette can help accurately estimate lentiviral TU titres, using p24 as a gauge. It can also be used to determine the optimal time when packaging preparation is ready for harvesting.

This kit contains 5 pouches of LentiTitre™ Cassette, 1 stock vial of 500µL LSS (Standard 1, 1×10^6 TU/mL) and 1 empty tube (Standard 2).

Features

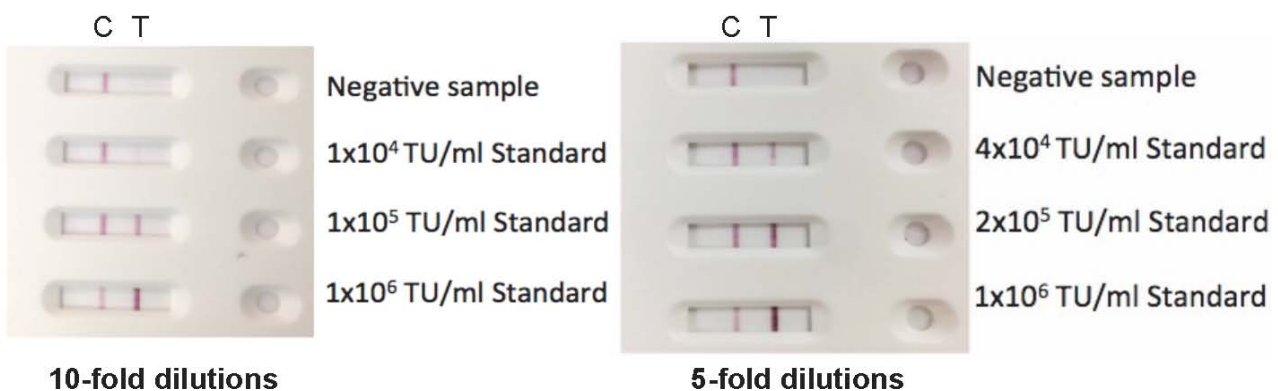
- **Simple and quick:** Load virus samples and read titres in 10 minutes.
- **Unique and safe:** Pre-titrated lentivirus standards are provided but inactivated to ensure safety.
- **Sensitive with large range:** Detect lentivirus titres as low as 10^4 TU/mL and up to 10^6 TU/mL.
- **Flexible with options:** To be more economic, multiple unknown samples can be titrated together with the same set of standards.

Protocol

- **Prepare the standards:** Use Standard 1 (1×10^6 TU/mL) directly; transfer 45µL of LSS in Standard 1 into Standard 2, and mix it with 405µL of fresh cell culture medium to make fresh Standard 2 (1×10^5 TU/mL); or make your own Standard 2 to desired titres (between 2×10^5 TU/mL and 4×10^4 TU/mL).

- **Prepare unknown samples:** Sample 1 is preferred to be lentiviral packaging supernatant, and Sample 2 is a 10-, 5- or 3-fold dilution of Sample 1.

- Place the cassette horizontally;
- Add 80 µL of each Standard to one of the sample wells;
- Add 80 µL of unknown samples (packaging supernatant) to one of the sample wells;
- Wait for 5~10 minutes; note that time difference between adding Standards and Samples is better to be less than 30 seconds;
- The Control line will always appear. Determine the titre of unknown lentiviral preparation by comparing the intensity of its Test line against those of the standards.



Storage

- Keep at room temperature for 18 months. Please not store below 0°C.
- Please make 5 aliquots of Standard 1 (90µL/vial) upon arrival, and then store them at -20°C. Use one aliquot each time.