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## DENV Titration

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**Protocol status:** Working

**We use this protocol and it's working**

**Created:** April 03, 2019

**Last Modified:** April 03, 2019

**Protocol Integer ID:** 22053



## Fixation of Cells

- 1 Prepare fixative - 80% methanol in water
- 2 Dump Methylcellulose overlay and blot on paper towels
- 3 Wash gently with 1X PBS. Incubate for 10 min. Blot and dry. ⌚ 00:10:00
- 4 Add 0.5 mL fixative to each well. Allow plates to sit at room temperature for 10 min.

### Note

*Note: Fixed cells can be stored at -70oC for future use. Leave methanol on cells when freezing.*

## Antibody

- 5 Wash plates with PBS. Incubate for 10 min. ⌚ 00:10:00

### Note

*If frozen plates are being used, incubate at 37oC for 30 min.*

- 6 Prepare antibody dilutions in 5% skim milk, PBS [m] 5 Mass / % volume Skim Milk

### Note

4G2 1:2000



- 7 Add 200  $\mu$ L to each well. Incubate at 37°C for 1 hour on a rocker. ⌚ 01:00:00

🌡 37 °C

*Minimize contact with each well by maintaining contact of the pipette tip with the wall of well.*

- 8 Dump off primary antibody solution and tap plates on paper towels to remove excess solution

- 9 Wash with 1 mL 5% skim milk, PBS

- 10 Prepare antibody dilutions in 5% skim milk, PBS.

#### Note

Anti-mouse-Per 1:2,000

- 11 Add 200  $\mu$ L to each well. Incubate at 37°C for 1 hour on a rocker. ⌚ 01:00:00

🌡 37 °C

## Color Development

- 12 Dump off antibody solution. Tap on paper towels

- 13 Wash twice with PBS. Tap on paper towel

- 14 Add 160  $\mu$ L of TrueBlue substrate per well

- 15 Place on rocker at RT until plaques develop (10 min or longer).



- 16 Dump off peroxidase substrate.
- 17 Count plates or incubate at 4oC for up to 7 days.