

#### 14. Protocol for CCK8 (Cell Counting kit – 8)

##### *Material*

PBS  
1.5 mL microcentrifuge tube  
96-well plate  
humidified incubator  
CCK-8 solution  
microplate reader

##### *Steps*

- ① The cells is washed with PBS and trypsinized prior to resuspension in fresh complete medium in a 1.5 mL microcentrifuge tube. Then cell count.
- ② Dispense 100  $\mu$ l of cell suspension (2500 cells/well) in a 96-well plate.
- ③ Pre-incubate the plates for 12/24/48/72 hours in a humidified incubator (at 37°C, 5% CO<sub>2</sub>).
- ④ In 12th/24th/48th/72th hour, dilute 10  $\mu$ L CCK-8 solution to 100  $\mu$ L add 100  $\mu$ l diluted CCK-8 solution to each well of the plate. Be careful not to introduce bubbles to the wells.
- ⑤ Incubate the plate for 2 hours in the incubator.
- ⑥ Measure the absorbance at 450 nm using a microplate reader

##### *Note*

- ① After joining CCK-8 Solution, test it after incubation of 2 h at 37 °C. If the time is not enough to add 1% SDS solution to each hole, room temperature light preservation, 24 h internal inspection, absorbent value will not be affected (the volume of adding 1% SDS solution is the same as the volume of adding CCK-8 Solution).
- ② CCK-8 Solution itself is low and does not affect cell growth. Therefore, cells treated with CCK-8 Solution can be discarded and then added to cell culture fluid for continuous culture.
- ③ If the measured absorbent value is very low we can increase the number of cells or extend the incubation time after joining CCK-8 Solution.