



TRAP Staining Kit

Introduction

The TRAP Staining Kit (Cat.No.PMC-AK04F-COS) is used for the staining of Tartrate-Resistant Acid Phosphatase in osteoclasts. Bone mass is controlled by the balance between the activity of osteoblasts bone formation and the activity of osteoclasts. Alkaline phosphatase (ALP: ALP staining kit, Cat.No.PMC-AK20-COS) and tartrate-resistant acid phosphate are used as markers for osteoblasts and osteoclasts, respectively.

Components

Component	Quantity	Storage
Tartrate-containing Buffer	50mL	4°C Do not freeze
Chromogenic Substrate	10vials	4°C

One kit contains reagents for 10 × 96-well plates

Additional Materials Required

- 10% Formalin Neutral Buffer Solution
- Phosphate Buffered Saline (PBS)
- Distilled or deionized water

Protocol (96-well plate format)

1. Remove culture medium. Wash each well once with 100uL of PBS.
2. Add 50uL of the 10% Formalin Neutral Buffer Solution to each well and fix for 5 minutes at room temperature.
3. Wash each well with 250uL of deionized water. (× 3 times)
4. Dissolve 1 vial of Chromogenic Substrate with 5mL of Tartrate-containing Buffer.
5. Add 50uL of Chromogenic Substrates to each well.
6. Incubate at 37°C for 20-60 minutes. Adjust incubation time until stained TRAP is clearly showing the result in figure 1.
7. Wash with deionized water to stop the reaction.

Note: Excess incubation will be cause of over stained.

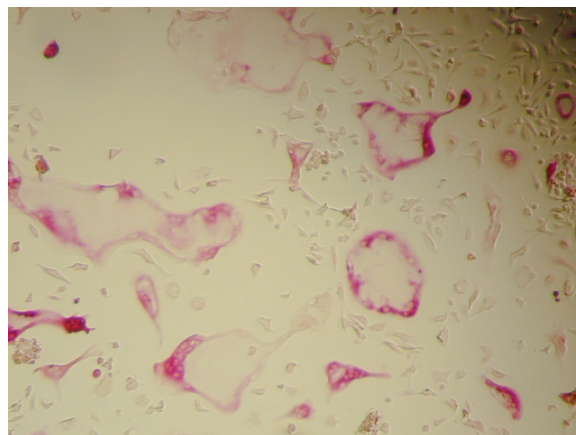


Figure 1: TRAP staining of Osteoclast



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