



## TRAP 5 Human, Mouse Monoclonal Antibody, Clone: TRAP-01

### Product Data Sheet

**Source of Antigen:** Sf 9 cells

**Host:** Mouse

**Isotype:** IgG1

**Other names:** TRACP 5

**Cat. No.:**

RD182025110-01 (0.1 mg)

### Research topic

Bone and cartilage metabolism

### Preparation

The antibody is a mouse monoclonal antibody against Human TRAP 5. The human TRAP 5 is isolated from Sf 9 cells (which expressed rTRAP).

### Species Reactivity

Human

Not yet tested in other species.

### Purification Method

Affinity chromatography on a column with immobilized protein G.

### Antibody Content

0.1 mg (determined by BCA method, BSA was used as a standard)

### Formulation

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. **AZIDE FREE.**

### Reconstitution

Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

### Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

### Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

### Expiration

See vial label.

### Lot Number

See vial label.

### Quality Control Test

SDS PAGE - to determine purity of the antibody

### Applications

Enzyme Immunoassay

### Introduction to the Molecule

TRAP 5 (serum band 5 tartrate-resistant acid phosphatase, TRACP 5; EC 3.1.3.2) is a glycoprotein of 35-37 kDa. TRAP 5

belongs to the most abundant enzymes in osteoclasts. It is expressed in certain differentiated cells of the mononuclear phagocyte system, particularly osteoclasts and alveolar macrophages, where it takes an active part in bone resorption process. High blood levels of TRAP 5 are usually associated with active bone remodelling. Increased serum levels are observed during normal bone growth among healthy children. Elevated serum TRAP levels have been detected in diseases characterized by increased bone resorption; Paget's disease of the bone, hemodialysis, primary hyperparathyroidism, metastatic malignancies involving bone resorption, multiple myeloma and bilaterally ovariectomized women. Post-menopausal women have higher levels of serum than post-menopausal women on estrogen replacement therapy. Therefore specific determination of TRAP 5 activity can be essential for clinical assessment of bone metabolism.

**Note**

This product is for research use only.