

### 30-2483: Anti-TNAP APC (Clone : W8B2B10)

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| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | W8B2B10  |
| <b>Application :</b>           | FACS   |
| <b>Reactivity :</b>            | Human  |
| <b>Conjugate :</b>             | APC  |
| <b>Gene :</b>                  | ALPL   |
| <b>Gene ID :</b>               | 249  |
| <b>Alternative Name :</b>      | Tissue Non-specific Alkaline Phosphatase, MSCA-1, liver/bone/kidney alkaline phosphatase, alkaline phosphatase, biomineralization associated |
| <b>Isotype :</b>               | Mouse IgG1   |
| <b>Immunogen Information :</b> | WERI-RB-1 retinoblastoma cell line   |

### Description

Tissue non-specific alkaline phosphatase (TNAP), also known as liver/bone/kidney alkaline phosphatase, or MSCA-1 (mesenchymal stem cell antigen 1) is a selective marker for the prospective isolation of bone marrow-derived mesenchymal stem cells and mesenchymal stem-like cells. It is expressed at high levels in liver, bone, kidney, or endometrium, as well as on embryonic stem cells (ESCs). TNAP also plays a role in bone mineralization. Mutations in TNAP gene are associated with hypercalcemia and skeletal defects (hypophosphatasia).

**Specificity :** The mouse monoclonal antibody W8B2B10 recognizes TNAP (tissue non-specific alkaline phosphatase), an ectoenzyme expressed mainly on embryonic stem cells, liver, bone, and kidney cells. This antibody is suitable for characterization of bone marrow-derived MSCs, iPSCs, and ESCs.

### Product Info

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| <b>Amount :</b>            | 0.1 mg   |
| <b>Purification :</b>      | The purified antibody is conjugated with allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography. |
| <b>Content :</b>           | 0.1 mg/ml<br>Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide  |
| <b>Storage condition :</b> | Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.  |

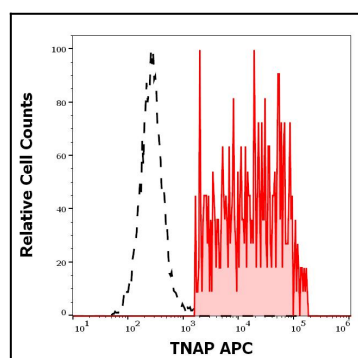


Figure 1: Separation of TNAP positive HeLa cells (red-filled) from TNAP negative HeLa cells (black-dashed) in flow cytometry analysis (surface staining) of HeLa cellular suspension stained using anti-TNAP (W8B2B10) APC antibody

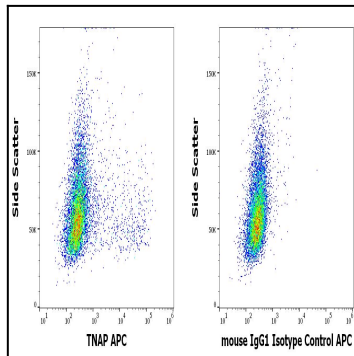


Figure 2: Flow cytometry surface staining patterns of HeLa cells stained using anti-TNAP (W8B2B10) APC antibody (concentration in sample 0.56  $\mu\text{g/ml}$ , left) or mouse IgG1 isotype control (MOPC-21) APC antibody