

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

<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

<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 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.

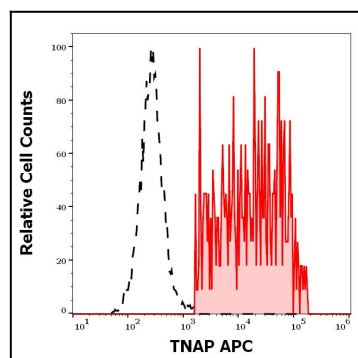


Figure 1: Separation of TNAP positive HeLa cells (red-filled) from TNAP negative HeLa cells (black-dashed) in flow cytometry analysis (surface staining) of HeLa cellular suspension stained using anti-TNAP (W8B2B10) APC antibody

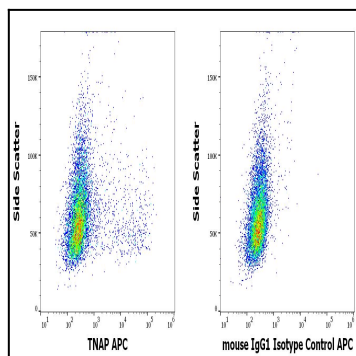


Figure 2: Flow cytometry surface staining patterns of HeLa cells stained using anti-TNAP (W8B2B10) APC antibody (concentration in sample 0.56  $\mu\text{g/ml}$ , left) or mouse IgG1 isotype control (MOPC-21) APC antibody