# Human STRO-1 Antibody

Monoclonal Mouse IgM Clone # STRO-1
Catalog Number: MAB1038

## DESCRIPTION

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|---|---|
| **Species Reactivity** | Human |
| **Specificity** | Detects human STRO-1. |
| **Source** | Monoclonal Mouse IgM Clone # STRO-1 |
| **Purification** | IgM-specific Affinity-purified from hybridoma culture supernatant |
| **Immunogen** | Human $CD34^+$ bone marrow cells |
| **Formulation** | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

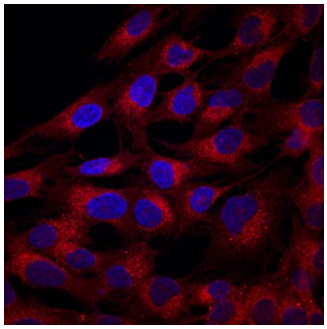
## APPLICATIONS

**Please Note:** *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

| | Recommended Concentration | Sample |
|---|---|---|
| **Flow Cytometry** | 2.5 µg/$10^6$ cells | MG-63 human osteosarcoma cell line |
| **Immunocytochemistry** | 8-25 µg/mL | See Below |

## DATA

**Immunocytochemistry**



**STRO-1 in Human MG-63 Cell Line.** STRO-1 was detected in immersion fixed MG-63 human osteosarcoma cell line using Human STRO-1 Monoclonal Antibody (Catalog # MAB1038) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgM Secondary Antibody (red; Catalog # NL019) (Catalog # NL019), and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

## PREPARATION AND STORAGE

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|---|---|
| **Reconstitution** | Reconstitute at 0.5 mg/mL in sterile PBS. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| **Stability & Storage** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

STRO-1 is a cell surface protein expressed by bone marrow stromal cells and erythroid precursors. The frequency of colony forming units-fibroblasts (CFU-F) was enriched 100-fold in the STRO-$1^+$/Glycophorin $A^-$ population from bone marrow cells (1). The subset of marrow cells that expresses the STRO-1 antigen is capable of differentiating into multiple mesenchymal lineages including hematopoiesis-supportive stromal cells with a vascular smooth muscle-like phenotype, adipocytes, osteoblasts, and chondrocytes (2).

**References:**


1. Simmons, P.J. and B. Torok-Storb (1991) Blood **78**:55.
2. Dennis, J.E. *et al*. (2002) Cells Tissues Organs **170**:73.





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