abcam

ab92395

# Anti-Bone marrow stromal cell antigen 1 antibody [SY11B5]

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | pH: 7.2 Preservative: 0.09% Sodium azide Constituents: PBS, 0.87% Sodium chloride |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Native Full Length Protein corresponding to Human BST1. Database link Q10588 |
| **Clone number** | SY11B5 |
| **Purification technique** | Affinity purification Protein G |
| **Concentration** | 0.5 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 0.5 µg for $10^6$ Cells |
| **Notes** | ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## Target data

See full target information BST1

| | |
|---|---|
| **Function** | Catalyzes both the synthesis of cyclic ADP-beta-D-ribose (cADPR) from NAD(+), and its hydrolysis to ADP-D-ribose (ADPR) (PubMed:7805847). Cyclic ADPR is known to serve as an endogenous second messenger that elicits calcium release from intracellular stores, and thus regulates the mobilization of intracellular calcium (Probable). May be involved in pre-B-cell growth (Probable). |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Storage information** | Avoid freeze / thaw cycle |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

| | |
|---|---|
| **Activity summary** | Bone marrow stromal cell antigen 1 (BST-1) also known as CD157 is a glycosylphosphatidylinositol-anchored protein with a molecular weight of approximately 38-42 kDa. You find BST-1 expression on the surface of various cell types especially within bone marrow stromal cells and cells of the immune system such as monocytes and macrophages. This protein functions as an ecto-enzyme with ADP-ribosyl cyclase activity and is part of the NADase enzyme family. Its mechanical role involves metabolizing extracellular NAD+ influencing cellular calcium signaling and energy metabolism. |
| **Biological function summary** | BST-1 contributes to the regulation of cellular interactions and immune responses. It participates in the organization of leukocyte trafficking and the formation of signal transduction cascades. BST-1 operates as a single protein but interacts with other membrane proteins to coordinate cellular communication. You can observe its function in processes like cell adhesion and migration impacting the immune surveillance and response systems. |
| **Pathways** | BST-1 plays a role in immune signaling and calcium-signaling pathways. In the immune system pathway it associates with molecules such as integrins to modulate leukocyte adhesion and transmigration. The calcium-signaling pathway |

| | |
|---|---|
| | is another key area where BST-1 interacts with intracellular proteins influencing various cellular targets and affecting metabolic processes critical for cell survival and proliferation. |
| **Associated diseases and disorders** | Scientists have linked BST-1 to various conditions such as leukemia and chronic inflammation. Its expression levels often change in these diseases emphasizing its potential role in their progression. Researchers also explore the connection between BST-1 and other proteins like CD38 in the context of leukemia where both proteins might participate in cancer cell proliferation and survival. Understanding BST-1 in disease contexts provides insights into disease mechanisms and potential therapeutic strategies. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

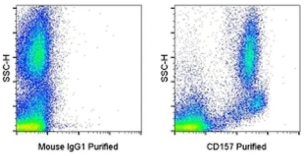
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

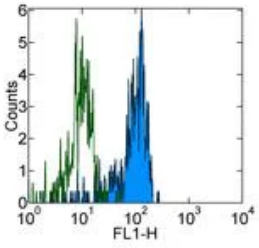
## 2 product images




### Flow Cytometry - Anti-Bone marrow stromal cell antigen 1 antibody [SY11B5] (ab92395)

Bone marrow stromal cell antigen 1 Flow Cytometry staining using mouse Anti-Bone marrow stromal cell antigen 1 antibody

Flow cytometry analysis labelling normal human peripheral blood cells with Mouse IgG1 K Isotype Control Purified (left) or ab92395 (right) at 0.25 µg, followed by F (ab')2 Anti-Mouse IgG PE.




## Flow Cytometry - Anti-Bone marrow stromal cell antigen 1 antibody [SY11B5] (ab92395)

Bone marrow stromal cell antigen 1 Flow Cytometry staining using mouse Anti-Bone marrow stromal cell antigen 1 antibody

Staining of normal human peripheral blood cells with ab92395 at 0.25 µg (blue histogram), or purified Mouse IgG1k, isotype control at 0.25 µg (green histogram), followed by treatment with FITC anti-mouse IgG. Cells in the monocyte gate were used for analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.