**Overview**

**Product name**
Anti-beta 2 Microglobulin antibody [B2M-01] (Phycoerythrin) ab49424

**Description**
Mouse monoclonal [B2M-01] to beta 2 Microglobulin (Phycoerythrin)

**Host species**
Mouse

**Conjugation**
Phycoerythrin. Ex: 488nm, Em: 575nm

**Specificity**
This antibody reacts with beta 2 microglobulin (b2M) associated with cell-surface MHC Class I molecules and other membrane antigens as well as with soluble beta 2 microglobulin. Beta 2 microglobulin is a 12 kDa Ig like glycoprotein expressed on lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells and epithelial cells. It is absent on erythrocytes.

**Tested applications**
Suitable for: Flow Cyt

**Species reactivity**
Reacts with: Human
Does not react with: Mouse, Rabbit, Chicken, Cow, Dog

**Immunogen**
Full length native protein (purified) (Human)

**Positive control**
Peripheral blood lymphocytes.

**General notes**
The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.

**Properties**

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<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
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<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C.</td>
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</table>
| Storage buffer | Preservative: 0.097% Sodium azide  
Constituents: PBS, 0.2% BSA |
| Purity     | Size exclusion |
| Clonality  | Monoclonal |
| Clone number | B2M-01 |
| Isotype    | IgG2a |

2 References
Our Abpromise guarantee covers the use of ab49424 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
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<tr>
<td>Flow Cyt</td>
<td></td>
<td>Use a concentration of 5 µg/ml.</td>
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**Target**

**Function**
Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system.

**Involvement in disease**
Defects in B2M are the cause of hypercatabolic hypoproteinemia (HYCATHYP) [MIM:241600]. Affected individuals show marked reduction in serum concentrations of immunoglobulin and albumin, probably due to rapid degradation.

Note=Beta-2-microglobulin may adopt the fibrillar configuration of amyloid in certain pathologic states. The capacity to assemble into amyloid fibrils is concentration dependent. Persistently high beta(2)-microglobulin serum levels lead to amyloidosis in patients on long-term hemodialysis.

**Sequence similarities**
Belongs to the beta-2-microglobulin family.
Contains 1 Ig-like C1-type (immunoglobulin-like) domain.

**Post-translational modifications**
Glycation of Ile-21 is observed in long-term hemodialysis patients.

**Cellular localization**
Secreted. Detected in serum and urine.

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