# Anti-CD22 antibody [RFB4] (Phycoerythrin) ab23620

## Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-CD22 antibody [RFB4] (Phycoerythrin)</th>
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</thead>
<tbody>
<tr>
<td>Description</td>
<td>Mouse monoclonal [RFB4] to CD22 (Phycoerythrin)</td>
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<tr>
<td>Host species</td>
<td>Mouse</td>
</tr>
<tr>
<td>Conjugation</td>
<td>Phycoerythrin. Ex: 488nm, Em: 575nm</td>
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<tr>
<td>Specificity</td>
<td>CD22 is in principle a B lineage antigen, that is present in the cytoplasm of progenitor B-cells and on the membrane of the majority of mature peripheral B-lymphocytes. Furthermore, it is strongly expressed on Hairy Cell Leukemia cells and very weakly on some other leukemias. Antigen distribution: Peripheral blood lymphocytes 12±3% T-cells (E+) &lt; 1% B-cells (E-, Ig+) 92±3% Monocytes (CD14+) &lt; 1% Granulocytes &lt; 1% Thymocytes &lt; 1%</td>
</tr>
</tbody>
</table>
| Tested applications | **Suitable for:** IHC-Fr, Flow Cyt  
**Unsuitable for:** IHC-P |
| Species reactivity | **Reacts with:** Human |
| Immunogen | Purified tonsil lymphocytes (Human). |

## Properties

<table>
<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. Do Not Freeze.</td>
</tr>
</tbody>
</table>
| Storage buffer | Preservative: 0.1% Sodium azide  
Constituent: 1% BSA |
| Purification notes | Purification by IEP (immunoelectrophoresis). |
| Primary antibody notes | ab23620 can be used for: - Quantitative determination of peripheral B-cells (CD22+) in blood. - Identification of CD22+ cells in tissue sections. - Determination of B-cell origin of lymphoid neoplasms. - Quantitative elimination or isolation of B-cells by flow cytometry or magnet beads. |
| Clonality | Monoclonal |
| Clone number | RFB4 |
| Isotype | IgG1 |

## Applications

2 References

## References

Table 1: Antibody Specificity and Reactivity

### Anti-CD22 antibody [RFB4] (Phycoerythrin) ab23620

- Suitable for: IHC-Fr, Flow Cyt
- Unsuitable for: IHC-P
- Reacts with: Human
- Immunogen: Purified tonsil lymphocytes (Human)
**Function**

Mediates B-cell B-cell interactions. May be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules.

**Tissue specificity**

B-lymphocytes.

**Sequence similarities**

Belongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family. Contains 6 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 Ig-like V-type (immunoglobulin-like) domain.

**Domain**

Contains 4 copies of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.

**Post-translational modifications**

Phosphorylation of Tyr-762, Tyr-807 and Tyr-822 are involved in binding to SYK, GRB2 and SYK, respectively. Phosphorylation of Tyr-842 is involved in binding to SYK, PLCG2 and PIK3R1/PIK3R2. Phosphorylated on tyrosine residues by LYN.

**Cellular localization**

Cell membrane.

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**Application notes**

Is unsuitable for IHC-P.

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**Target**

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