Technical Data Sheet
FITC Rat Anti-Rat CD45.1

Product Information

**Material Number:** 550802
**Alternate Name:** RT7.1 of LCA
**Size:** 0.1 mg
**Concentration:** 0.5 mg/ml
**Clone:** NDS58
**Immunogen:** LEW rat thymocytes
**Isotype:** Rat (AS) IgG2b, κ
**Reactivity:** QC Testing: Rat
**Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

Description
The NDS58 antibody reacts with all isoforms of CD45 (Leukocyte Common Antigen) on all hematopoietic cells, excluding the more mature erythroid cells, in strains expressing the RT7.1 alloantigen. The antibody does not react with the RT7.2 alloantigen. RT7.1 strains include ACI, AO, BN, DA, DZB, LEW, MAXX, PVG, SHR, and WAG; while BUF, LOU, and WF are RT7.2 strains. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family: Its intracellular (COOH-terminal) region contains two PTP catalytic domains, and the extracellular region is highly variable due to alternative splicing of exons 4, 5, and 6 (designated A, B, and C, respectively), plus differing levels of glycosylation. The CD45 isoforms detected in the rat are cell type-, maturation-, and activation state-specific. The CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.

Preparation and Storage
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

**Application**
Flow cytometry

Routinely Tested

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>553988</td>
<td>FITC Rat IgG2b, κ Isotype Control</td>
<td>0.25 mg</td>
<td>A95-1</td>
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Product Notices
1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References