Technical Data Sheet

BB515 Mouse Anti-Human ROR1

Product Information

**Material Number:** 565087  
**Alternate Name:** Neurotrophic tyrosine kinase, receptor-related 1; NTRKR1  
**Size:** 50 Tests  
**Vol. per Test:** 5 µl  
**Clone:** 4A5  
**Immunogen:** Human ROR1 cDNA  
**Isotype:** Mouse (BALB/c) IgG2b, κ  
**QC Testing:** Human  
**Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 4A5 monoclonal antibody binds to the glycosylated type I membrane protein ROR1 (Receptor-tyrosine-kinase-like Orphan Receptor 1). The ROR1 and ROR2 related proteins are highly conserved evolutionarily and are primarily expressed during embryogenesis. ROR1 is not expressed on normal peripheral blood lymphocytes. ROR1 is similar to tropomyosin receptor kinase (Trk family) neurotropic receptors and shares a cysteine-rich domain with Frizzled receptors for Wnt-family signaling proteins, which are involved in the regulation of embryogenesis and carcinogenesis. Furthermore, there is mounting evidence that aberrant ROR1 expression contributes to human malignancy.

The antibody was conjugated to BD Horizon BB515 which was developed exclusively by BD Biosciences. With an excitation max of 490 nm and an emission max of 515 nm, BD Horizon BB515 can be excited by the 488 nm laser and detected in a standard FITC set (e.g. 530/30-nm filter). This dye provides a much brighter alternative to FITC with less spillover into the PE detector.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with BD Horizon™ BB515 under optimum conditions and unconjugated antibody was removed.

Application Notes

**Application**  
Flow cytometry  
Routinely Tested

**Recommended Assay Procedure:**

For optimal results, it is recommended to perform 2 washes after staining with antibodies. Cells may be prepared, stained with antibodies and washed twice with wash buffer per established protocols for immunofluorescent staining, prior to acquisition on a flow cytometer. Performing fewer than the recommended wash steps may lead to increased spread of the negative population.
## Suggested Companion Products

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<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
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<tr>
<td>563794</td>
<td>Brilliant Stain Buffer</td>
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<tr>
<td>564510</td>
<td>BBS15 Mouse IgG2b, κ Isotype Control</td>
<td>50 µg</td>
<td>27-35</td>
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</table>

## Product Notices
1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
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.
4. The manufacture, use, sale, offer for sale, or import of this product is subject to one or more patents or pending applications. This product, and only in the amount purchased by buyer, may be used solely for buyer’s own internal research, in a manner consistent with the accompanying product literature. No other right to use, sell or otherwise transfer (a) this product, or (b) its components is hereby granted expressly, by implication or by estoppel. Diagnostic uses require a separate license.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

## References


