Product Datasheet

Siglec-3/CD33 Antibody
NBP2-29619

Unit Size: 0.1 mg

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Publications: 1

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### NBP2-29619
Siglec-3/CD33 Antibody

#### Product Information

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<tbody>
<tr>
<td><strong>Unit Size</strong></td>
<td>0.1 mg</td>
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<tr>
<td><strong>Concentration</strong></td>
<td>1.0 mg/ml</td>
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<tr>
<td><strong>Storage</strong></td>
<td>Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.</td>
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<tr>
<td><strong>Clonality</strong></td>
<td>Polyclonal</td>
</tr>
<tr>
<td><strong>Preservative</strong></td>
<td>0.05% Sodium Azide</td>
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<tr>
<td><strong>Isotype</strong></td>
<td>IgG</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein A purified</td>
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<tr>
<td><strong>Buffer</strong></td>
<td>PBS</td>
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#### Product Description

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<tbody>
<tr>
<td><strong>Host</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Gene ID</strong></td>
<td>945</td>
</tr>
<tr>
<td><strong>Gene Symbol</strong></td>
<td>CD33</td>
</tr>
<tr>
<td><strong>Species</strong></td>
<td>Human</td>
</tr>
<tr>
<td><strong>Reactivity Notes</strong></td>
<td>Human.</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Partial recombinant protein made to an internal portion of human CD33 protein (between residues 30-200) [UniProt P20138]</td>
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#### Product Application Details

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<tr>
<td><strong>Applications</strong></td>
<td>Western Blot, ELISA, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Paraffin</td>
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<tr>
<td><strong>Recommended Dilutions</strong></td>
<td>Western Blot 1 ug/ml, Flow Cytometry, ELISA, Immunohistochemistry 5 ug/ml, Immunohistochemistry-Paraffin 5 ug/ml</td>
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</table>

**Application Notes**

The canonical form of CD33 is 364 amino acids long (~39.8 kDa) and it is processed via cleavage of signal peptide (n-terminal amino acids 1-17). This protein is a single-pass type I membrane protein with an extracellular domain as well as a cytoplasmic tail, so that it is expected to produce a membrane-cytoplasmic pattern in immunostaining assays. Use in FLOW cytometry and ELISA reported in scientific literature (PMID 27535972)
Western Blot: CD33 Antibody [NBP2-29619] - Western blot analysis of CD33 in the partial recombinant protein.

Immunohistochemistry-Paraffin: CD33 Antibody [NBP2-29619] - IHC-P analysis of CD33 protein in a section of human small intestinal malignant stromal tumor using 5 ug/ml concentration of CD33 antibody. The cancer cells developed the expected membrane-cytoplasmic staining pattern.

Publications
**Procedures**

**Immunohistochemistry-Paraffin Protocol for CD33 Antibody (NBP2-29619)**

1. Deparaffinize the tissue sections by immersing the slides in Xylene with two changes for 10 min each. Sections should not get dried at any stage from this point.
2. Rehydrate the tissue sections by immersing the slides in decreasing grades of ethanol as follows:
   a. Immerse in 100% ethanol with 2 changes for 5 minutes each
   b. Immerse in 95% ethanol with 2 changes for 5 minutes each
   c. Immerse in 90% ethanol for 5 minutes
   d. Immerse in 70% ethanol for 5 minutes
   e. Immerse in 50% ethanol for 5 minutes
   f. Immerse in distilled water for 5 minutes
3. Antigen Retrieval (Microwave Method):
   a. Immerse the slides in a microwave compatible tray containing 10 mM Sodium Citrate buffer (pH 6.0) with 0.05% Tween 20.
   b. Boil the slides and maintain the sub-boiling temperature for 5 minutes in the microwave. Thereafter, take out the tray very carefully and cool it at room temperature (RT) for about 30 minutes.
   c. Wash the slides 3 times, 3 minutes each by immersing them in TBST (Tris Buffered Saline having 0.05% Tween 20).
4. Quenching of Endogenous Peroxidase:
   a. Incubate the slides in 3% hydrogen peroxide prepared in methanol for 15 minutes (at RT, in dark conditions).
   b. Wash the slides in TBST 3 times, 3 minutes each.
5. Protein Blocking:
   a. Incubate the sections with background sniper solution at RT for 15 minutes (Biocare Medicals, USA).
   b. Wash the sections 3 times, 3 min each by immersing the slides in TBST.
6. Primary Antibody:
   a. Dilute the primary antibody at 5μg/ml concentration using PBS as a diluent.
   b. Incubate the sections with diluted primary antibody for 90 minutes at RT in a humidified chamber.
   c. Thereafter, wash the slides 4 times, 5 minutes each with TBST.
7. Probe (Secondary Reagent):
   a. Incubate with MACH 1 Mouse probe for 15 minutes at RT.
   b. Incubate for 30 min at room temperature with HRP-Polymer (Biocare Medical, USA).
   c. Wash the slides with TBST 4 times, 5 minutes each
8. Chromogen:
   a. Mix 32ul of DAB Chromogen with 1 ml of DAB substrate buffer (Biocare Medical, USA).
   b. Apply 200ul DAB mixture/section and incubate at RT in dark conditions (few seconds - 5 minutes).
   c. As soon as an appropriate color develops, rinse the slides with deionized water (2-3 brief rinses).
9. Counter stain:
   a. Counter stain with Hematoxylin for 30 seconds (Vector Labs, USA).
   b. Wash in deionized water for 1-2 minutes to clear the extra stain.
   c. Incubate the slides in bluing solution or Scott's water twice for 2 minutes each time.
10. Dehydrate the sections in increasing grades of alcohols:
    a. 50% alcohol for 1 minute
    b. 70% for 1 minute
    c. 90% for 1 minute
    d. 95% for 1 minute
    e. 100% for 1 minute
   f. Xylene with 2 changes for 2 minutes each
11. Mount with DPX mount and cover-slip glass (Fisher Scientific, USA), carefully not allowing any air bubbles to enter.

**Note:** This protocol is provided as a reference tool only. Depending upon the type of tissues /tissue processing and reagents employed, the end user will need to optimize the final conditions for achieving an expected staining.
Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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