

**DESCRIPTION**

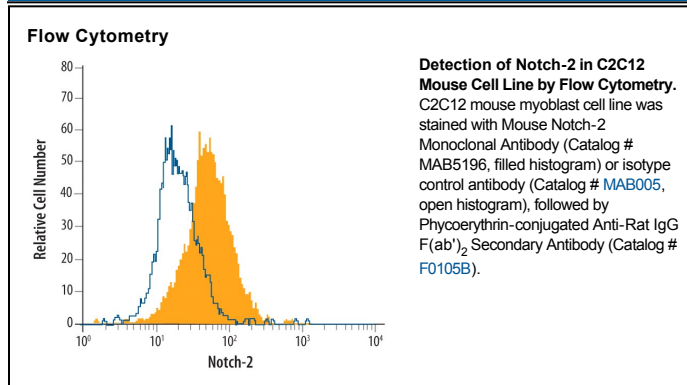
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse   |
| <b>Specificity</b>        | Detects mouse Notch-2 in direct ELISAs. In direct ELISAs, 50-100% cross-reactivity with recombinant human (rh) Notch-2 and no cross-reactivity with rhNotch-1, -2, -3, recombinant mouse (rm) Notch-1, rmNotch-3, recombinant rat (rr) Notch2, or rrDLL1 is observed. |
| <b>Source</b>             | Monoclonal Rat IgG <sub>1</sub> Clone # 605724  |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Chinese hamster ovary cell line CHO-derived recombinant mouse Notch-2<br>Leu26-Val528 (predicted)<br>Accession # O35516   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.   |

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                       | <b>Recommended Concentration</b>   | <b>Sample</b> |
|-----------------------|--|---------------|
| <b>Flow Cytometry</b> | 2.5 µg/10 <sup>6</sup> cells   | See Below     |
| <b>CyTOF-ready</b>    | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. |               |

**DATA**



**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Sterile PBS to a final concentration of 0.5 mg/mL.   |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

**BACKGROUND**

Notch-2 (also Notch-2) is a 280-300 kDa member of the notch family of transmembrane (TM) proteins. It is found on multiple cell types and exhibits multiple functions. On CD8<sup>+</sup> T cells, it augments cytotoxic activity; on pre-B cells, it drives B1 B cell development; on endothelial cells, it induces apoptosis; and on proerythroblasts, it promotes proliferation. Mature mouse Notch-2 is a 2445 amino acid (aa) type I TM glycoprotein. It undergoes Golgi processing to generate a 180-200 kDa extracellular domain (ECD) (aa 26-1606) possibly covalently-linked to a 100-110 kDa membrane bound C-terminal segment (aa 1607-2470). Upon binding to Delta1, Jagged1, or Jagged2, the 110 kDa segment undergoes two cleavages, the second which generates an NICD (notch intracellular domain) that serves as a potential nuclear transcription factor. There are three potential splice variants. One shows a 32 aa substitution for aa 293-2470, a second contains a 13 aa substitution for aa 1-1954, and a third possesses a five aa substitution for aa 224-227 coupled to an 11 aa substitution for aa 1704-1713. Over aa 26-528, mouse Notch-2 shares 96% and 94% aa identity with rat and human Notch-2, respectively.