Notch4 (L5C5) Mouse mAb

**Applications**

<table>
<thead>
<tr>
<th>Species Cross-Reactivity*</th>
<th>Molecular Wt.</th>
<th>Isotype</th>
</tr>
</thead>
<tbody>
<tr>
<td>W, IP</td>
<td>80 kDa cleaved</td>
<td>Mouse IgG1**</td>
</tr>
<tr>
<td>Transfected</td>
<td>230 kDa full-length</td>
<td></td>
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</tbody>
</table>

**Background:** Notch proteins (Notch1-4) are a family of transmembrane receptors that play important roles in development and the determination of cell fate (1). Mature Notch receptors are processed and assembled as heterodimeric proteins, with each dimer comprised of a large extracellular ligand-binding domain, a single-pass transmembrane domain, and a smaller cytoplasmic subunit (Notch intracellular domain, NICD) (2). Binding of Notch receptors to ligands of the Delta-Serrate-Lag2 (DSL) family triggers heterodimer dissociation, exposing the receptors to proteolytic cleavages; these result in release of the NICD, which translocates to the nucleus and activates transcription of downstream target genes (3-4).

Notch4 is primarily expressed in endothelial cells and is processed similarly to Notch1 (5-7). The mouse Notch4 gene (also known as Int-3) is a frequent target in Mouse Mammary Tumour Virus (MMTV)-induced mammary tumors (6,8). The intracellular domain of Notch4 binds to Smad3 and inhibits TGF-β signaling (9).

**Specificity/Sensitivity:** Notch4 (L5C5) Mouse mAb detects levels of the transfected intracellular region of human Notch4 protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a recombinant protein consisting of the Ankyrin repeat domain of human Notch4.

**Background References:**

(9) Sun, Y. et al. (2005) Oncogene 24, 5365-5374.

**Recommended Antibody Dilutions:**

- Western blotting 1:1000
- Immunoprecipitation 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

**Important:** For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-mouse secondary antibodies must be used to detect this antibody.

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- Immunoprecipitation 1:50

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