

## Product Information

**Anti-Notch 1 antibody, Rat monoclonal**  
clone ICN 5B5, purified from hybridoma cell culture

Product Number **SAB4200024**

### Product Description

Anti-Notch 1 (rat IgG2b isotype) is derived from the hybridoma ICN 5B5 produced by the fusion of mouse myeloma cells and splenocytes from rat immunized with a recombinant fusion protein corresponding to a fragment of human Notch 1 (GenelD: 4851) fusion protein. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-Notch 1 recognizes human Notch 1. The antibody may be used in various immunochemical techniques including immunoblotting (~120 kDa).

Notch signaling plays a key role in the normal development of many tissues and cell types, through diverse effects on differentiation, survival, and/or proliferation that are highly dependent on signal strength and cellular context. Members of the Notch gene family encode transmembrane receptors that are critical for various cell fate decisions. Notch family members share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple different domain types. Multiple human Notch proteins (Notch1-4) have been identified and they function as receptors for membrane bound ligands. Notch signaling is also linked to tumorigenesis as first demonstrated by the identification of a recurrent t(7;9)(q34;q34.3) chromosomal translocation involving the human *NOTCH1* gene that is found in a small subset of human pre-T-cell acute lymphoblastic leukemias (T-ALL). Since this discovery, aberrant Notch signaling has been suggested to be involved in a wide variety of human neoplasms including T-cell acute lymphoblastic leukemia.<sup>1-5</sup>

### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

### Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

### Product Profile

Immunoblotting: a working antibody concentration of 2-4 µg/mL is recommended using a whole extract of human Jurkat cells and developing with a sensitive film.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

### References

1. Allenspach, E.J. et al., *Cancer Biol. Ther.*, **1**, 466-476 (2002).
2. Levy, O.A. et al., *Dev. Neurosci.*, **24**, 79-88 (2002).
3. Ellisen, L.W. et al., *Cell*, **66**, 649-661 (1991).
4. Larsson, C. et al., *Genomics*, **24**, 253-258 (1994).
5. Fortini, M.E., *Dev. Cell*, **16**, 633-647 (2009).

RC,VS,MG,KAA,PHC,MAM 04/21-1