

Product datasheet for TA336494

OriGene Technologies, Inc.

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NOTCH1 Mouse Monoclonal Antibody [Clone ID: mN1A]

Product data:

Product Type: Primary Antibodies

Clone Name: mN1A

Applications: FC, IF, WB

Recommended Dilution: WB: 1-2 ug/ml, FC: 1 ug per million cells, IF: 1:50 - 1:100, IHC: 1:10-1:500, IHC-P: 1:10-1:500, IP:

1:10-1:100

Reactivity: Human, Mouse (Does not react with: Rat)

Host: Mouse

Isotype: IgG1, kappa **Clonality:** Monoclonal

Immunogen: Mouse Notch1 protein [UniProt Q01705]

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Protein G purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 272.505 kDa

Gene Name: notch 1

Database Link: NP 060087

Entrez Gene 18128 MouseEntrez Gene 25496 RatEntrez Gene 4851 Human

P46531





Background: Notch1, also known as neurogenic locus notch homolog protein 1, is a single-pass

transmembrane protein that serves as the receptor for the Delta1, Jagged1 and Jagged2 ligands. Activation of Notch1 causes the cytoplasmic domain to be cleaved, releasing the notch intracellular domain (NICD) which forms a complex with RBPJ/RBPSUH and subsequently influences transcription of its target genes. Because the majority of Notch1 ligands are transmembrane proteins, Notch1 is primarily triggered by cell-to-cell contact and employs lateral inhibition mechanisms to influence local populations of cells. The Notch1 pathway plays a pivotal role in development, including cell-fate determination, proliferation, and cell contact-dependent signaling. Aberrant activation of the Notch1 pathway has been associated with numerous diseases such as bicuspid aortic valve and cancer - in particular certain leukemias.

Synonyms: AOS5; AOVD1; hN1; TAN1

Note: The mN1A monoclonal antibody reacts with the intracellular domain of mouse and human

Notch1 and has been reported to have highest affinity for activated intracellular Notch1 and

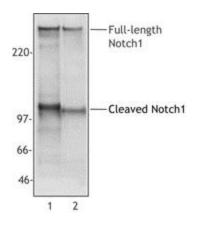
lower affinity for full-length unprocessed/heterodimeric Notch1 forms.

Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Stem cell

relevant signaling - DSL/Notch pathway

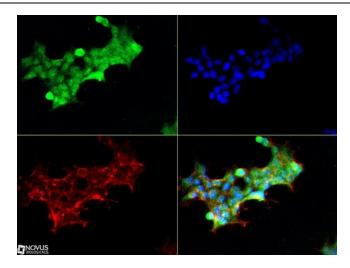
Protein Pathways: Dorso-ventral axis formation, Notch signaling pathway, Prion diseases

Product images:

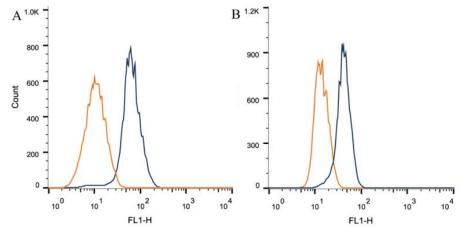


Western Blot: Notch1 Antibody (mN1A) TA336494 - Cell extracts from Jurkat (Lane 1) or mouse thymocytes (Lane 2) were Western Blot analyzed with monoclonal anti-NOTCH1 antibody. The mN1A antibody recognizes both mouse and human 270 kD full-length NOTCH1





Immunocytochemistry/Immunofluorescence: Notch1 Antibody (mN1A) TA336494 - The Notch1 Antibody was tested in HEK293 cells at a 1:50 dilution against Dylight 488 (Green). Actin was counterstained against Phalloidin 568 (Red) and cells were mounted in DAP



Flow Cytometry: Notch1 Antibody (mN1A) TA336494 - Intracellular flow cytometric staining of 1 x 10^6 CHO (A) and MCF-7 (B) cells using Notch1 antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used.