PTCH1 Polyclonal Antibody

E90826

Catalog Number: E90826
Amount: 100ul
Background: Patched1 and 2 (PTCH1 and PTCH2) are twelve-pass transmembrane proteins that function as the receiving receptors for members of the Hedgehog family of proteins (1-4). In the absence of Hedgehog proteins, PTCH suppresses the otherwise constitutively active signaling receptor Smoothened (Smo) so that the Hedgehog signaling pathway is in the off state (5,6). Deactivating mutations that impair the ability of PTCH1 to suppress Smo are frequently found in patients with nevoid basal cell carcinoma syndrome (7,8). PTCH proteins have a sterol-sensing domain (SSD) also found in several proteins that function in cholesterol homeostasis, such as HMGCR (3-hydroxy-3-methylglutaryl coenzyme A-reductase) and SCAP (sterol regulatory element-binding protein-cleavage activating protein). However, the role of the SSD in Patched proteins is not clear (9,10). PTCH1 itself is a target of Hedgehog signaling (11), with elevated PTCH1 expression as a surrogate marker for Hedgehog pathway activation (12-14).
Species: Rabbit
Isotype: IgG
Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms: BCNS; FLJ26746; FLJ42602; HPE7; NBCCS; PTC; PTC1; PTCH; PTCH11;
Immunogen: A synthetic peptide of human PTCH1
Purification: Affinity purification
Reactivity: H M
Applications: WB IHC
Molecular Weight: 161kDa
Swiss-Prot No. : Q13635
Gene ID: 5727
References: 1. Stone, D.M. et al. (1996) Nature 384, 129-134. 2. Chen, Y. and Struhl, G. (1996) Cell 87, 553-563. 3. Motoyama, J. et al. (1998) Nat. Genet. 18, 104-106. 4. Smyth, I. et al. (1999) Hum. Mol. Genet. 8, 291-297. 5. Ingham, P.W. and McMahon, A.P. (2001) Genes Dev. 15, 3059-3087. 6. McMahon, A.P. et al. (2003) Curr. Top. Dev. Biol. 53, 1-114. 7. Hahn, H. et al. (1996) Cell 85, 841-851. 8. Johnson, R.L. et al. (1996) Science 272, 1668-1671. 9. Kuwabara, P.E. and Labouesse, M. (2002) Trends Genet. 18, 193-201. 10. Chang, T.Y. et al. (2006) Annu. Rev. Cell Dev. Biol. 22, 129-157. 11. Agren, M. et al. (2004) Gene 330, 101-114. 12. Watkins, D.N. et al. (2003) Nature 422, 313-317. 13. Berman, D.M. et al. (2003) Nature 425, 846-851. 14. Karhadkar, S.S. et al. (2004) Nature 431, 707-712.

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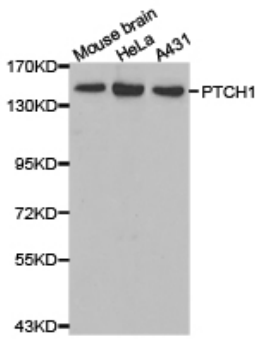
WB 1:500 - 1:1000

IHC 1:50- 1:100



Western blot analysis of extracts of various celllines, using PTCH1antibody.

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