

Rabbit anti-Human PTCH2 Polyclonal Antibody | anti-PTCH2 antibody

Anti-PTCH2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125771	Rabbit	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PTCH2; Polyclonal Antibody; Anti-PTCH2 Antibody; UNQ560/PRO1121/PRO57079; Protein patched homolog 2; PTC2; patched 2; anti-PTCH2 antibody

PRODUCT SPECIFICATIONS

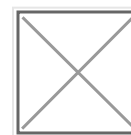
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for PTCH2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-PTCH2 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human PTCH2 (FDYAHSQRALFDLHQR).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



IF (Immunofluorescence)

Figure 4. IF analysis of PTCH2 using anti- PTCH2 antibody (AAA125771).PTCH2 was detected in immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti-PTCH2 Antibody (AAA125771) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of PTCH2 using anti-PTCH2 antibody (AAA125771).PTCH2 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-PTCH2 Antibody (AAA125771) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of PTCH2 using anti-PTCH2 antibody (AAA125771). PTCH2 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-PTCH2 Antibody (AAA125771) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PTCH2 using anti-PTCH2 antibody (AAA125771). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human THP-1 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PTCH2 antigen affinity purified polyclonal antibody (Catalog # AAA125771) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PTCH2 at approximately 150KD. The expected band size for PTCH2 is at 150KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PTCH2 antibody	PTCH2 (patched 2), also known as PTC2, encodes a 1,203-amino acid putative transmembrane protein that is highly homologous to the PTCH product. The Patched-hedgehog signaling pathway is involved in establishing segment polarity and the anterior-posterior orientation of a number of developing appendages. The pathway is conserved from fly to vertebrates and has been implicated in a number of human neoplasms and developmental syndromes. Mutations in the human Patched gene are the basis of the nevoid basal cell carcinoma syndrome. With age, homozygous mutant male mice developed skin lesions consisting of alopecia and epidermal hyperplasia, suggesting a role for Ptch2 in adult epidermal homeostasis via Shh signaling.
References	1. Nieuwenhuis, E., Motoyama, J., Barnfield, P. C., Yoshikawa, Y., Zhang, X., Mo, R., Crackower, M. A., Hui, C. Mice with a targeted mutation of Patched 2 are viable but develop alopecia and epidermal hyperplasia. <i>Molec. Cell Biol.</i> 26: 6609-6622, 2006.

NCBI AND UNIPROT INFORMATION

NCBI GI #	12643356
NCBI GeneID	8643
UniProt Accession #	Q9Y6C5; O95341; O95856; Q53Z57; Q5QP87; Q6UX14
Molecular Weight	124,909 Da
NCBI Official Full Name	Protein patched homolog 2
NCBI Official Synonym Full Names	patched 2
NCBI Official Symbol	PTCH2
NCBI Official Synonym Symbols	PTC2
NCBI Protein Information	protein patched homolog 2
UniProt Protein Name	Protein patched homolog 2
UniProt Gene Name	PTCH2
UniProt Synonym Gene Names	PTC2
UniProt Entry Name	PTC2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.