

Anti-Patched/PTCH1 Picoband Antibody

Catalog # ABO12043

Specification

Anti-Patched/PTCH1 Picoband Antibody - Product Information

Application WB
Primary Accession O13635
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Protein patched homolog 1(PTCH1) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Patched/PTCH1 Picoband Antibody - Additional Information

Gene ID 5727

Other Names

Protein patched homolog 1, PTC, PTC1, PTCH1, PTCH

Calculated MW 160545 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Mouse, Rat, Human

Subcellular Localization

Membrane; Multi-pass membrane protein.

Tissue Specificity

In the adult, expressed in brain, lung, liver, heart, placenta, skeletal muscle, pancreas and kidney. Expressed in tumor cells but not in normal skin.

Protein Name

Protein patched homolog 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human Patched recombinant protein (Position: D1219-N1447). Human Patched shares 91% amino acid (aa) sequence identity with mouse Patched.

Purification



Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the patched family.

Anti-Patched/PTCH1 Picoband Antibody - Protein Information

Name PTCH1

Synonyms PTCH

Function

Acts as a receptor for sonic hedgehog (SHH), indian hedgehog (IHH) and desert hedgehog (DHH). Associates with the smoothened protein (SMO) to transduce the hedgehog's proteins signal. Seems to have a tumor suppressor function, as inactivation of this protein is probably a necessary, if not sufficient step for tumorigenesis.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q61115}; Multi-pass membrane protein

Tissue Location

In the adult, expressed in brain, lung, liver, heart, placenta, skeletal muscle, pancreas and kidney. Expressed in tumor cells but not in normal skin

Anti-Patched/PTCH1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Patched/PTCH1 Picoband Antibody - Images





Anti- Patched Picoband antibody, ABO12043, Western blottingAll lanes: Anti Patched (ABO12043) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Liver Tissue Lysate at 50ugLane 3: Mouse Brain Tissue Lysate at 50ugLane 4: Mouse Liver Tissue Lysate at 50ugPredicted bind size: 160KDObserved bind size: 160KD

Anti-Patched/PTCH1 Picoband Antibody - Background

PTCH1 is also known as PTC, BCNS or HPE7. This gene encodes a member of the patched gene family. The encoded protein is the receptor for sonic hedgehog, a secreted molecule implicated in the formation of embryonic structures and in tumorigenesis, as well as the desert hedgehog and indian hedgehog proteins. This gene functions as a tumor suppressor. Mutations of this gene have been associated with basal cell nevus syndrome, esophageal squamous cell carcinoma, trichoepitheliomas, transitional cell carcinomas of the bladder, as well as holoprosencephaly. Alternative splicing results in multiple transcript variants encoding different isoforms. Additional splice variants have been described, but their full length sequences and biological validity cannot be determined currently.