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Anti-DELTA-4 (RABBIT) Antibody
DELTA-4 Antibody
Catalog # ASR5284

Specification

Anti-DELTA-4 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-DELTA-4 has been tested for use in ELISA, immunohistochemistry and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 74 kDa in size corresponding to DELTA-4 by western blotting in the appropriate cell lysate or extract. For best results use Goat Serum as blocking agent in western blotting.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Anti-DELTA-4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of Human DELTA-4.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-DELTA-4 (RABBIT) Antibody - Additional Information

Gene ID 54567

Other Names
54567

Purity
DELTA-4 affinity purified antibody is directed against human DELTA-4. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest reactivity with this protein from human based on 100% homology for the immunogen sequence. However, cross reactivity is expected with mouse, rat and chimpanzee DELTA-4 based on a 91% homology to the core 12 amino acid sequence within the 14 amino acid immunogen sequence. Cross reactivity with DELTA-4 homologues from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after

standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-DELTA-4 (RABBIT) Antibody - Protein Information

Name DLL4

Function
Involved in the Notch signaling pathway as Notch ligand (PubMed:11134954). Activates NOTCH1 and NOTCH4. Involved in angiogenesis; negatively regulates endothelial cell proliferation and migration and angiogenic sprouting (PubMed:20616313). Essential for retinal progenitor proliferation. Required for suppressing rod fates in late retinal progenitors as well as for proper generation of other retinal cell types (By similarity). During spinal cord neurogenesis, inhibits V2a interneuron fate (PubMed:17728344).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed in vascular endothelium.

Anti-DELTA-4 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-DELTA-4 (RABBIT) Antibody - Images

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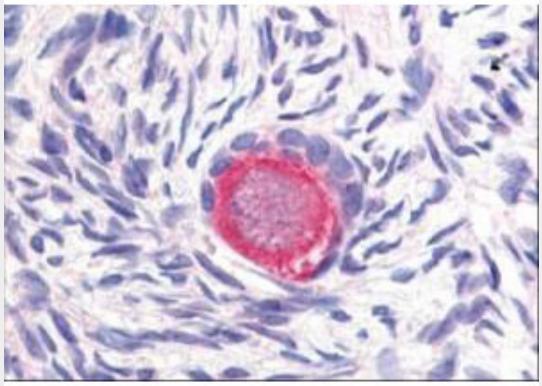

Rockland's Affinity Purified anti-Delta-4 antibody was used at 20 µg/ml to detect Delta-4 in a variety of tissues including colon, liver, skeletal muscle, ovary, pancreas, prostate, testes, thymus, tonsil and uterus. In contrast to reported findings, no staining was observed in vascular tissue. This image shows Delta-4 staining of human ovary. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

Anti-DELTA-4 (RABBIT) Antibody - Background

DELTA-4 (also called delta 4 precursor, delta ligand 4 precursor, Delta-like protein 4, DLL4, Drosophila Delta homolog 4 and notch ligand DLL4 precursor) is a homolog of the Drosophila delta protein. The delta gene family encodes Notch ligands that are characterized by a DSL domain, EGF repeats, and a transmembrane domain. DELTA-4 plays a role in the Notch signaling pathway and activates Notch-1 and Notch-4. DELTA-4 is a membrane protein that is expressed in the vascular endothelium.