Datasheet: AHP1274

**Description:** RABBIT ANTI HUMAN DELTA-LIKE PROTEIN 4

**Specificity:** DELTA-LIKE PROTEIN 4

**Other names:** DLL4

**Format:** Purified

**Product Type:** Polyclonal Antibody

**Isotype:** Polyclonal IgG

**Quantity:** 50 µg

**RRID** AB_2092966

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Flow Cytometry</td>
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<tr>
<td>Immunohistology - Frozen</td>
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<tr>
<td>Immunohistology - Paraffin</td>
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<td>5 - 15µg/ml</td>
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<td>ELISA</td>
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<td>1/3000 - 1/15000</td>
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<td>Western Blotting</td>
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<td>1/300 - 1/1500</td>
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<tr>
<td>Functional Assays</td>
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Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**Target Species** Human

**Species Cross Reactivity** Based on sequence similarity, is expected to react with: Mouse, Rat, Chimpanzee

**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form** Purified IgG - liquid

**Antiserum Preparation** Antisera to DLL4 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.

**Buffer Solution** Phosphate buffered saline

**Preservative Stabilisers** 0.09% Sodium Azide (NaN₃)

**Approx. Protein Concentrations** IgG concentration 0.5 mg/ml
Immunogen

Synthetic peptide corresponding to the internal region of human DLL4.

External Database Links

UniProt:

Q9NR61  Related reagents

Entrez Gene:

54567  DLL4  Related reagents

Specificity

Rabbit anti Human Delta-like Protein 4 antibody detects human Delta-like protein 4 (DLL4), also known as Delta-4. DLL4 is a 685 amino acid single pass type I transmembrane glycoprotein of ~72 kDa containing a single DSL domain and eight EGF-like domains. Human DLL4 is the homologue of the Drosophila delta protein, and functions as a transmembrane bound ligand to the Notch receptor, Notch1.

DLL4 is expressed in the vasculature and plays a critical role in vascular development. It is induced by vascular endothelial growth factor (VEGF), as a negative feedback regulator to regulate angiogenic sprouting and promote the formation of a differentiated vascular network (Mailhos et al., 2001). DLL4 has been found to be strongly expressed in tumour vessels of primary renal tumours (Patel et al., 2005) and bladder cancer (Patel et al., 2006), and inhibition of DLL4 results in increased vascular proliferation but defective maturation. This in turn leads to a decrease in tumour growth, with no apparent toxicity (Ridgway et al., 2006).

Expression of DLL4 in normal human dermis is low in foetal tissues, becomes more intense during early life (0-20 years) and gradually declines thereafter as shown by immunohistochemical studies on FFPE tissues using rabbit anti human DLL4 antibody (Gunin et al., 2014).

Histology Positive Control Tissue

Human ovary.

Western Blotting

AHP1274 detects a band of approximately 74kDa in pancreatic cell lysates.

References


Further Reading


Storage

Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature.
the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

**Guarantee**

18 months from date of despatch.

**Health And Safety Information**


**Regulatory**

For research purposes only

**Related Products**

**Recommended Secondary Antibodies**

Sheep Anti Rabbit IgG (STAR34...)  **FITC**
Goat Anti Rabbit IgG (H/L) (STAR124...)  **HRP**
Goat Anti Rabbit IgG (Fc) (STAR121...)  **Biotin, FITC, HRP**
Sheep Anti Rabbit IgG (STAR35...)  **RPE**
Sheep Anti Rabbit IgG (2AB02...)  **Biotin**
Sheep Anti Rabbit IgG (STAR36...)  **DyLight®488, DyLight®680, DyLight®800**

**Recommended Useful Reagents**

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)
ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025C)
TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)