abcam

# ab317269

# Anti-Nectin-4 antibody [EPR29074-48] - BSA and Azide free

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Carrier free** | Yes |
| **Clone number** | EPR29074-48 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.009 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Dot

### Tested

| | |
|---|---|
| **Species** | Recombinant fragment - Human |
| **Dilution info** | - |

| | |
|---|---|
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Recombinant fragment - Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Recombinant fragment - Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## WB

**Not recommended**

| | |
|---|---|
| **Species** | Human, Mouse, Rat, Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

## IP

**Not recommended**

| | |
|---|---|
| **Species** | Human, Recombinant fragment - Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

**Not recommended**

| | |
|---|---|
| **Species** | Human, Mouse, Rat, Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

# Target data

See full target information NECTIN4

**Function** Seems to be involved in cell adhesion through trans-homophilic and -heterophilic interactions, the latter including specifically interactions with NECTIN1. Does not act as receptor for alpha-herpesvirus entry into cells. (Microbial infection) Acts as a receptor for measles virus.

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |

## Notes

ab317269 is the carrirer-free version of ab317268.

**Patented technology**

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**What are the advantages of a recombinant monoclonal antibody?**

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

**Conjugation ready**

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

**Compatibility**

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

| | |
|---|---|
| **Activity summary** | Nectin-4 also known as PVRL4 is a member of the immunoglobulin-like adhesion molecule family. It has a molecular weight of approximately 66 kDa. Nectin-4 plays an important role in cell-cell adhesion by forming trans-dimers promoting cellular cohesion. It is expressed in tissues such as placenta embryonic tissues and several epithelial cancers indicating its potential involvement in developmental processes and pathological conditions. When utilizing methods such as 'nectin-4 ELISA' and |

| | |
|---|---|
| | 'nectin-4 IHC' researchers can study its expression extensively across different tissue samples. |
| **Biological function summary** | Nectin-4 functions as an important adhesion molecule that contributes to the maintenance and organization of cell junctions. It is often part of larger adhesive complexes that include afadin which links nectin proteins to the actin cytoskeleton stabilizing cell structure. Besides its role in maintaining cell-cell adhesion nectin-4 is significant in processes like cellular polarization and migration. These properties make it an important target for understanding tissue development and integrity as well as cancer metastasis. |
| **Pathways** | Nectin-4 belongs to the pathways regulating cell adhesion and the cytoskeletal organization. It is closely associated with the cadherin and integrin signaling pathways where it collaborates with other nectin family members and afadin to regulate these networks. These interactions impact cellular processes such as signal transduction and intercellular communication critical for tissue maintenance. Studies involving 'nectin expression' help further elucidate these pathway connections and their implications in healthy and diseased tissues. |
| **Associated diseases and disorders** | Nectin-4 shows significant correlation with certain cancers such as breast and lung carcinoma. Its elevated expression in tumor tissues suggests a role in tumorigenesis and cancer progression. The protein's interaction with oncogenes like HER2 indicates a possible pathway by which nectin-4 affects cancer cell proliferation and survival. Understanding 'nectin-4 expression' in the context of these diseases aids in identifying potential biomarkers and therapeutic targets for cancer diagnosis and treatment. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

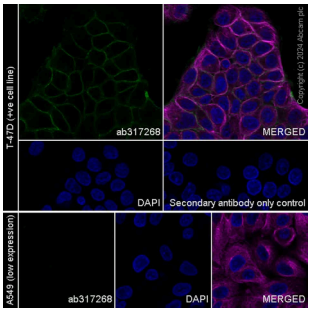
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We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

## 4 product images




### Immunocytochemistry/ Immunofluorescence - Anti-Nectin-4 antibody [EPR29074-48] - BSA and Azide free (ab317269)

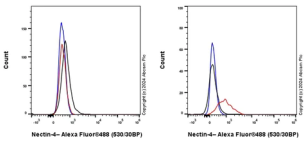
This data was developed using ab317268, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized T-47D (human ductal breast epithelial tumor epithelial cell) cells labelling Nectin-4 with ab317268 at 1/50 (10.14 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green).

Confocal image showing membrane staining in T-47D cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue).
Low expression: A549 (PMID:21901103).
Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5ug/ml) dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



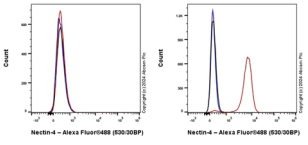
### Flow Cytometry - Anti-Nectin-4 antibody [EPR29074-48] - BSA and Azide free (ab317269)

This data was developed using ab317268, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of DLD-1 (human colorectal adenocarcinoma epithelial cell) (Right) / HeLa (human cervical adenocarcinoma epithelial cell) (Left) cells labelling Nectin-4 with ab317268 at 1/500 dilution (0.1ug)/red compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Low expression: HeLa (PMID:21901103).



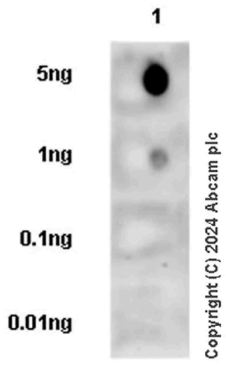
### Flow Cytometry - Anti-Nectin-4 antibody [EPR29074-48] - BSA and Azide free (ab317269)

This data was developed using ab317268, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of T-47D (human ductal breast epithelial tumor epithelial cel) (Right) / A549 (human lung carcinoma epithelial cell) (Left) cells labelling Nectin-4 with ab317268 at 1/500 dilution (0.1ug)/red compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Low expression: A549 (PMID:21901103).




## Dot Blot - Anti-Nectin-4 antibody [EPR29074-48] - BSA and Azide free (ab317269)

Nectin-4 Dot Blot staining of Human Nectin-4 fragment using rabbit Anti-Nectin-4 antibody

This data was developed using ab317268, the same antibody clone in a different buffer formulation.

Dot blot analysis of Nectin-4 using ab317268 at 1:1000 (0.507 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1:100,000 dilution.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Dot Blot - Anti-Nectin-4 antibody [EPR29074-48] (ab317268) at 1/1000 dilution

All lanes:
Human Nectin-4 fragment

Secondary

All lanes:
Dot Blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Exposure time: 180s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.