abcam

**ab6106**

# Anti-hnRNP L antibody [4D11]

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | Preservative: 0.1% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Native Full Length Protein corresponding to Human HNRNPL. Database link P14866 |
| **Clone number** | 4D11 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |
| **Purification notes** | Purified from supernatant. |

## Reactivity data

## IHC-P

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1 µg/mL |
| **Notes** | Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

## IP

### Tested

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

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1 µg for $10^6$ Cells |
| **Notes** | ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/2000 |
| **Notes** | - |

# Target data

See full target information HNRNPL

**Function**

Splicing factor binding to exonic or intronic sites and acting as either an activator or repressor of exon inclusion. Exhibits a binding preference for CA-rich elements (PubMed:11809897, PubMed:22570490, PubMed:24164894, PubMed:25623890, PubMed:26051023). Component of the heterogeneous nuclear ribonucleoprotein (hnRNP) complexes and associated with most nascent transcripts (PubMed:2687284). Associates, together with APEX1, to the negative calcium responsive element (nCaRE) B2 of the APEX2 promoter (PubMed:11809897). As part of a ribonucleoprotein complex composed at least of ZNF827, HNRNPK and the circular RNA circZNF827 that nucleates the complex on chromatin, may negatively regulate the transcription of genes involved in neuronal differentiation (PubMed:33174841). Regulates alternative splicing of a core group of genes involved in neuronal differentiation, likely by mediating H3K36me3-coupled

transcription elongation and co-transcriptional RNA processing via interaction with CHD8.

## Storage

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|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | Heterogeneous nuclear ribonucleoprotein L commonly known as hnRNP L functions in the processing of pre-mRNA. It binds to RNA sequences influencing mRNA stability splicing and nuclear export. The protein weighs approximately 64 kDa and is typically expressed in a variety of human tissues including the brain and liver. hnRNP L contains RNA recognition motifs that allow dynamic interaction with RNA playing a central role in gene expression regulation. |
| **Biological function summary** | HnRNP L contributes to alternative splicing by modulating intron retention and exon skipping. It operates as a monomer but may interact with other hnRNP family members to form complexes. These complexes allow hnRNP L to exert its influence over mRNA metabolism in different cellular contexts ensuring the diverse expression of proteins necessary for various cellular functions. |
| **Pathways** | HnRNP L integrates into the mRNA splicing and transport pathways significantly affecting gene expression. It interacts with other splicing factors such as SR proteins helping to orchestrate the formation of spliceosomes. These interactions further connect hnRNP L to the pathway involving the regulation of alternative splicing choices affecting how cells respond to environmental and developmental cues. |
| **Associated diseases and disorders** | HnRNP L shows implications in cancer and autoimmune diseases. Abnormal regulation or expression of hnRNP L has associations with tumor progression particularly influencing cancer-related genes through altered splicing patterns. Additionally hnRNP L interacts with autoimmune-related proteins such as SRSF1 which suggests its role in the pathogenesis of autoimmune conditions. |

Understanding these interactions provides valuable insights into potential therapeutic targets.

## 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**

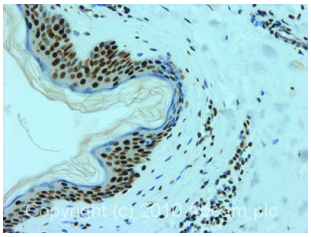
We do not recommend this combination. It is not covered by our product promise.

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.

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## 3 product images

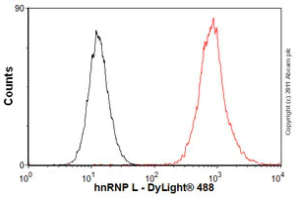


## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP L antibody [4D11] (ab6106)

HnRNP L Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-hnRNP L antibody

IHC image of ab6106 staining in human normal skin formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab6106, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

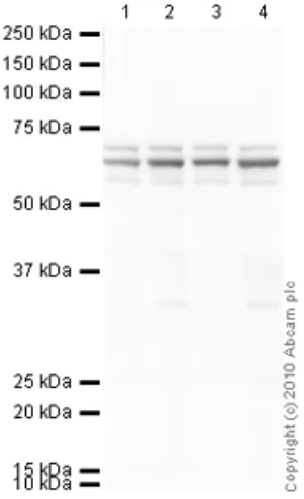
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.




## Flow Cytometry - Anti-hnRNP L antibody [4D11] (ab6106)

HnRNP L Flow Cytometry staining using mouse Anti-hnRNP L antibody

Overlay histogram showing Jurkat cells stained with ab6106 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab6106, 1µg/1x$10^6$ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x$10^6$ cells) used under the same conditions. Acquisition of >5,000 events was performed.




## Western blot - Anti-hnRNP L antibody [4D11] (ab6106)

HnRNP L Western blot staining using mouse Anti-hnRNP L antibody

All lanes:
Western blot - Anti-hnRNP L antibody [4D11] (ab6106) at 1 µg/mL

Lane 1:
HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 10 µg

Lane 2:
Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate at 10 µg

Lane 3:
MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate at 10 µg

Lane 4:
HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 64 kDa

Observed band size: 60 kDa, 64 kDa, 68 kDa

Exposure time: 1min

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