

## Product datasheet

### Anti-JAK1 antibody [EPR349(N)] ab133666

KO VALIDATED

Recombinant

RabMAb

[32 References](#) [7 Images](#)

#### Overview

Product name	Anti-JAK1 antibody [EPR349(N)]
Description	Rabbit monoclonal [EPR349(N)] to JAK1
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Ramos, HT-29, HeLa and Jurkat whole cell lysate ( <a href="#">ab7899</a> )
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR349(N)
Isotype	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab133666 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 133 kDa.

## Target

### Function

Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway. Kinase partner for the interleukin (IL)-2 receptor.

### Tissue specificity

Expressed at higher levels in primary colon tumors than in normal colon tissue. The expression level in metastatic colon tumors is comparable to the expression level in normal colon tissue.

### Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. JAK subfamily.  
Contains 1 FERM domain.  
Contains 1 protein kinase domain.  
Contains 1 SH2 domain.

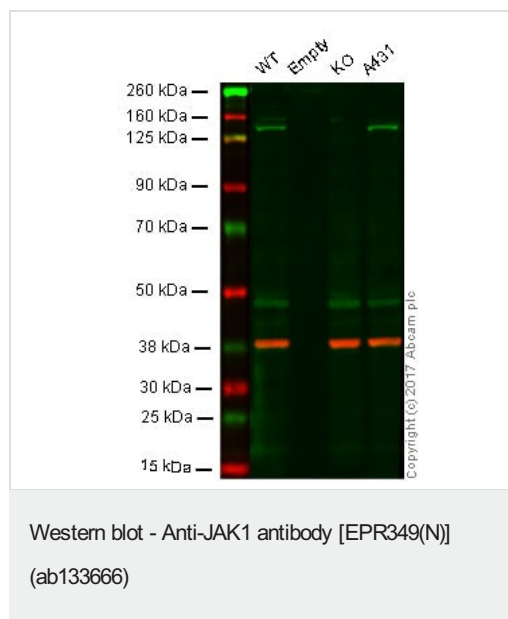
### Domain

Possesses two phosphotransferase domains. The second one probably contains the catalytic domain (By similarity), while the presence of slight differences suggest a different role for domain 1.  
The FERM domain mediates interaction with JAKMIP1.

### Cellular localization

Endomembrane system. Wholly intracellular, possibly membrane associated.

## Images



**Lane 1:** Wild-type HAP1 whole cell lysate (40 µg)

**Lane 2:** Empty

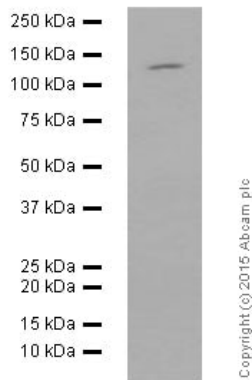
**Lane 3:** JAK1 (KO) whole cell lysate (40 µg)

**Lane 4:** A431 whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab133666 observed at 133 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab133666 was shown to specifically recognize JAK1 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when JAK1 knockout samples were examined. Wild-type and JAK1 knockout samples were subjected to SDS-PAGE. Ab133666 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature

before imaging.



Western blot - Anti-JAK1 antibody [EPR349(N)]  
(ab133666)

Anti-JAK1 antibody [EPR349(N)] (ab133666) at 1/1000 dilution  
(purified) + Rat kidney tissue lysate at 20 µg

### Secondary

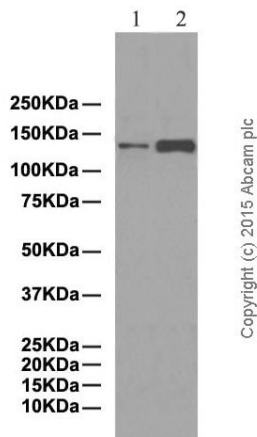
HRP goat anti-rabbit IgG (H+L) at 1/20000 dilution

**Predicted band size:** 133 kDa

**Observed band size:** 130 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-JAK1 antibody [EPR349(N)]  
(ab133666)

**All lanes :** Anti-JAK1 antibody [EPR349(N)] (ab133666) at 1/2000  
dilution (purified)

**Lane 1 :** Jurkat cell lysate

**Lane 2 :** A431 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

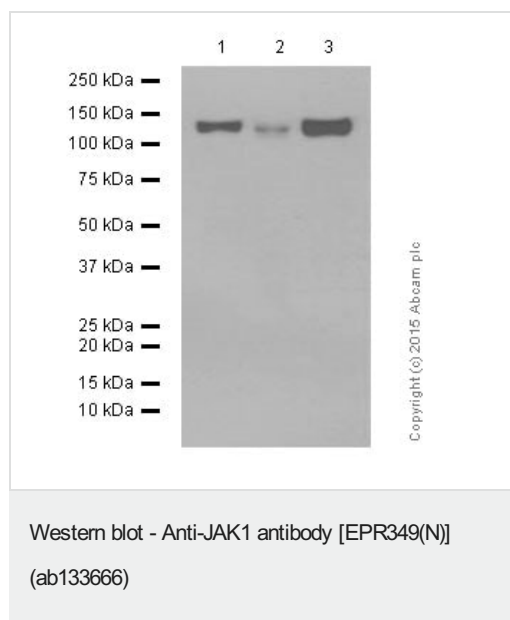
**All lanes :** HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

**Predicted band size:** 133 kDa

**Observed band size:** 130 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



**All lanes :** Anti-JAK1 antibody [EPR349(N)] (ab133666) at 1/1000 dilution (purified)

**Lane 1 :** RAW264.7 cell lysate

**Lane 2 :** PC-12 cell lysate

**Lane 3 :** NIH/3T3 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

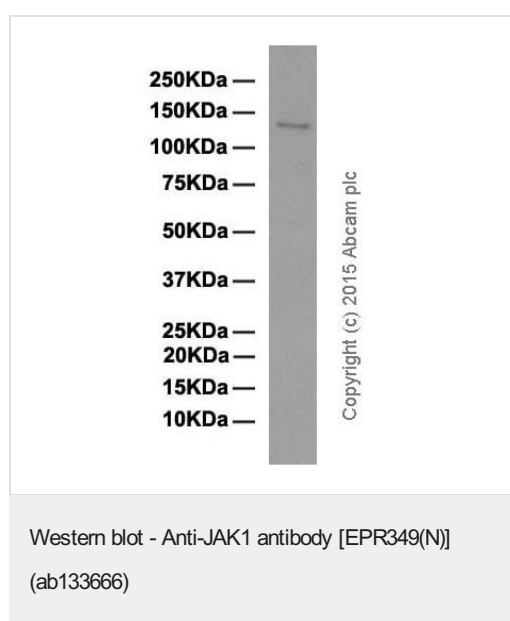
**All lanes :** HRP goat anti-rabbit IgG (H+L) at 1/20000 dilution

**Predicted band size:** 133 kDa

**Observed band size:** 130 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Anti-JAK1 antibody [EPR349(N)] (ab133666) at 1/1000 dilution (purified) + HeLa cell lysate at 10 µg

### Secondary

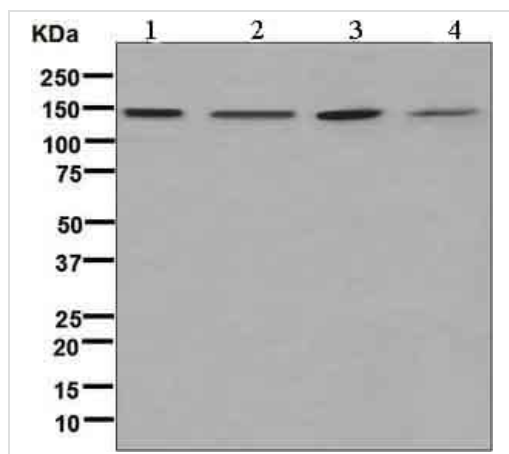
HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

**Predicted band size:** 133 kDa

**Observed band size:** 130 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-JAK1 antibody [EPR349(N)]  
(ab133666)

**All lanes :** Anti-JAK1 antibody [EPR349(N)] (ab133666) at 1/1000 dilution (unpurified)

**Lane 1 :** Ramos cell lysate

**Lane 2 :** HT-29 cell lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 133 kDa

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-JAK1 antibody [EPR349(N)] (ab133666)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
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