

# **Product datasheet**

# Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] ab138005

Recombinant RabMAb

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\*\*\*\*\* 1 Abreviews 44 References 8 Images

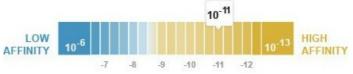
Product name	Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)]	
Description	Rabbit monoclonal [EPR1899(2)] to JAK1 (phospho Y1034 + Y1035)	
Host species	Rabbit	
Specificity	According to our ELISA result, this antibody preferentially recognizes JAK1 with phospho Y1035 but also recognizes JAK1 with phospho Y1034 if high amount peptides were coated.	
Tested applications	Suitable for: WB, IHC-P, Dot blot, ELISA	
Species reactivity	Reacts with: Human	
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
Positive control	WB: Ramos treated with 1mM pervanadate for 30 minutes whole cell lysate. IHC-P: Human colo adenocarcinoma and liver carcinoma tissue. Dot: JAK1 (pY1034), JAK1 (pY1035) and JAK1 (pY1034/pY1035) phospho peptides. ELISA: JAK1 (pY1034), JAK1 (pY1035) and JAK1 non-phospho peptides.	
General notes	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <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> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> <li>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</li> </ul>	

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. Avoid freeze / thaw cycle.

# Dissociation constant (K<sub>D</sub>)

K<sub>D</sub> = 1.99 x 10 <sup>-11</sup> M



Learn more about K<sub>D</sub>

Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.21% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1899(2)
lsotype	lgG

# Applications

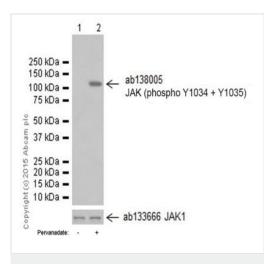
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab138005 in the following tested applications.

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

Application	Abreviews	Notes
WB	<b>★★★★★ (1)</b>	1/1000 - 1/10000. Predicted molecular weight: 133 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
Dot blot		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.

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



Western blot - Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005) **All lanes :** Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005) at 1/500 dilution

Lane 1 : Untreated Ramos whole cell lysate Lane 2 : Ramos treated with 1mM pervanadate for 30 minutes whole cell lysate

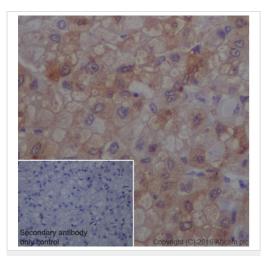
Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

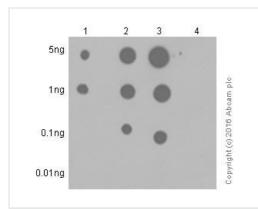
Predicted band size: 133 kDa Observed band size: 133 kDa

Blocking and diluting buffer 5% NFDM/TBST.

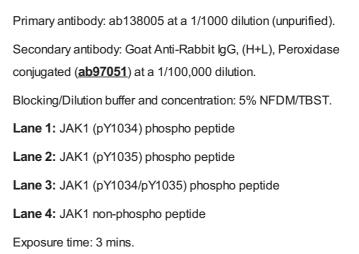


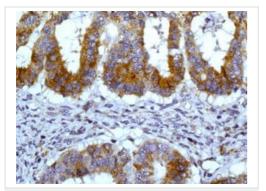
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005) Immunohistochemical analysis of paraffin-embedded human liver carcinoma sections labelling JAK1 (phospho Y1034 + Y1035) with purified ab138005 at dilution of 1/50. The secondary antibody used was ImmunoHistoProbe HRP Polymer for Rabbit IgG at dilution of 1:0. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0.

PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Dot Blot - Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005)

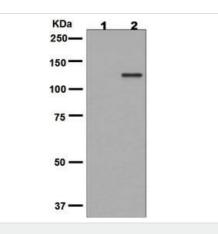




Immunohistochemical analysis of paraffin embedded human colon adenocarcinoma tissue labelling JAK1 with unpurified ab138005 antibody at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005)



Western blot - Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005) All lanes : Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005) at 1/1000 dilution (unpurified)

Lane 1 : Ramos cell lysates

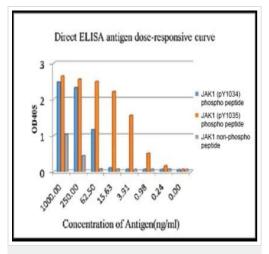
Lane 2: Ramos cell lysates, treated with pervanadate

Lysates/proteins at 10 µg per lane.

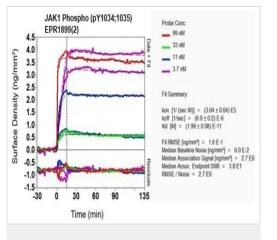
### Secondary

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

Predicted band size: 133 kDa



ELISA - Anti-JAK1 (phospho Y1034 + Y1035) antibody [EPR1899(2)] (ab138005)



OI-RD Scanning - Anti-JAK1 (phospho Y1034 +

Y1035) antibody [EPR1899(2)] (ab138005)



Anti-JAK1 (phospho Y1034 + Y1035) antibody

[EPR1899(2)] (ab138005)

#### Antigen:

JAK1 (pY1034) phospho peptide

JAK1 (pY1035) phospho peptide

JAK1 non-phospho peptide

Antigen concentration: 0~1000ng/ml

Primary antibody concentration range: 1000ng/ml

Secondary antibody: Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), 1/2500 dilution

Equilibrium disassociation constant (K<sub>D</sub>)

Learn more about  $\mathrm{K}_\mathrm{D}$ 

# Click here to learn more about KD

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