

Product datasheet

Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] ab138005

Recombinant RabMAb

9 References 7 Images

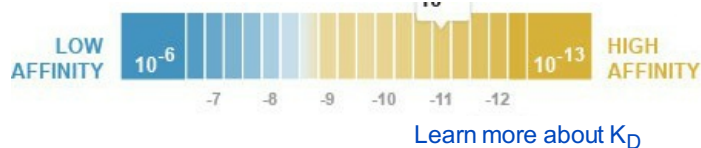
Overview

Product name	Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)]
Description	Rabbit monoclonal [EPR1899(2)] to JAK1 (phospho Y1022 + Y1023)
Host species	Rabbit
Specificity	According to our ELISA result, this antibody preferentially recognizes JAK1 with phospho Y1023, but also recognizes JAK1 with phospho Y1022 if high amount peptides were coated.
Tested applications	Suitable for: WB, IHC-P, Dot blot, ELISA
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human JAK1 aa 1000-1100. The exact sequence is proprietary. Database link: P23458
Positive control	WB: Ramos cell lysates IHC-P: Human colon adenocarcinoma and live carcinoma tissue
General notes	<p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>This product is a recombinant rabbit monoclonal antibody.</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. Avoid freeze / thaw cycle.
Dissociation constant (K_D)	K _D = 1.99 x 10 ⁻¹¹ M

10⁻¹¹



Storage buffer	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.21% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1899(2)
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab138005** in the following tested applications.

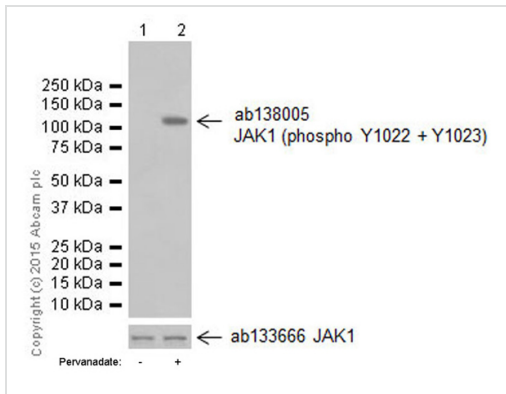
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		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 IHC antigen retrieval protocols .
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 Y1022 + Y1023) antibody [EPR1899(2)] (ab138005)

All lanes : Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] (ab138005) at 1/5000 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.

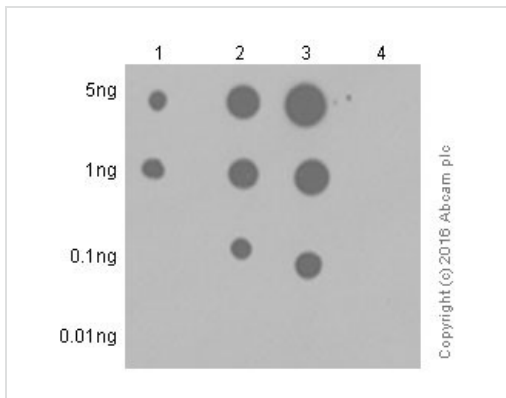
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 133 kDa

Observed band size: 133 kDa

Blocking and Diluting buffer 5% NFDm/TBST



Dot Blot - Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] (ab138005)

Primary antibody: 1/1000 (unpurified)

Secondary antibody: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051)

Secondary ab dilution: 1/100,000

Blocking buffer and concentration: 5% NFDm/TBST

Diluting buffer and concentration: 5% NFDm /TBST

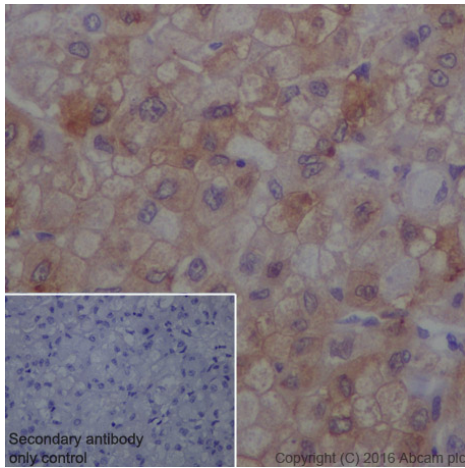
Lane 1: JAK1 (pY1022) phospho peptide

Lane 2: JAK1 (pY1023) phospho peptide

Lane 3: JAK1 (pY1022/pY1023) phospho peptide

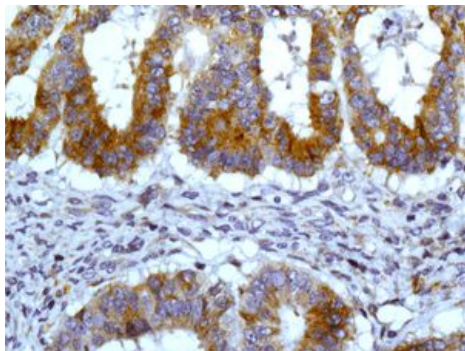
Lane 4: JAK1 non-phospho peptide

Exposure time: 3 minutes.



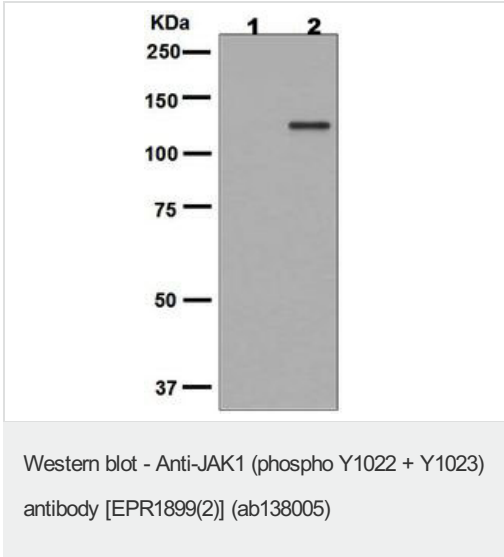
Immunohistochemical analysis of paraffin-embedded human liver carcinoma sections labelling JAK1 (phospho Y1022 + Y1023) with purified ab138005 at dilution of 1/50. The secondary antibody used was ImmunoHistoProbe HRP Polymer for Rabbit IgG at dilution of 1:0. The sample was counterstained with hematoxylin. 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.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] (ab138005)



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

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] (ab138005)



All lanes : Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] (ab138005) at 1/1000 dilution (unpurified)

Lane 1 : Ramos cell lysates

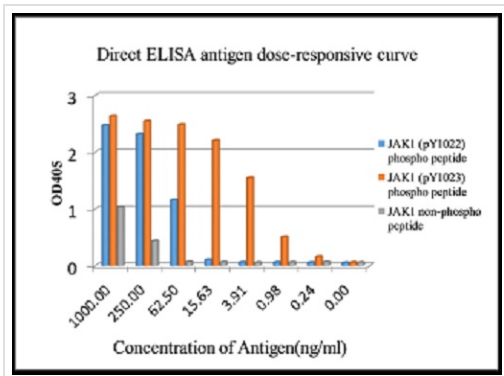
Lane 2 : Ramos cell lysates, treated with pervanadate

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 Y1022 + Y1023) antibody [EPR1899(2)] (ab138005)

Antigen:

JAK1 (pY1022) phospho peptide

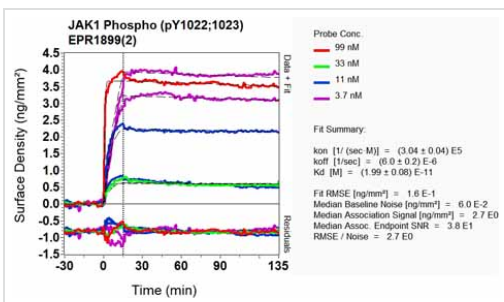
JAK1 (pY1023) phospho peptide

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



Other - Anti-JAK1 (phospho Y1022 + Y1023) antibody [EPR1899(2)] (ab138005)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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