abcam

Product datasheet

Anti-YY1 antibody [EPR4652] - Nuclear Loading Control ab109237

Recombinant RabMAb

10 Abreviews 45 References 14 Images

Overview

Product name	Anti-YY1 antibody [EPR4652] - Nuclear Loading Control
Description	Rabbit monoclonal [EPR4652] to YY1 - Nuclear Loading Control
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF, Flow Cyt (Intra), ChIC/CUT&RUN-seq **Unsuitable for:** ChIP or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, Daudi, Y79, and HuT-78 cell lysates, mouse and rat heart tissue. IHC-P: Human kidney, tonsil and cervix carcinoma tissues. ICC/IF: HeLa and HUT-78 cells.
General notes	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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR4652
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109237 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	★★★★☆ **(7)**	1/2000 - 1/10000. Predicted molecular weight: 45 kDa.
IHC-P	★★★★☆ **(1)**	1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. **For unpurified use at 1/250 - 1/500.**
ICC/IF		1/50. **For unpurified use at 1/100 - 1/250.**
Flow Cyt (Intra)		Use at an assay dependent concentration.
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.

Application notes Is unsuitable for ChIP or IP.

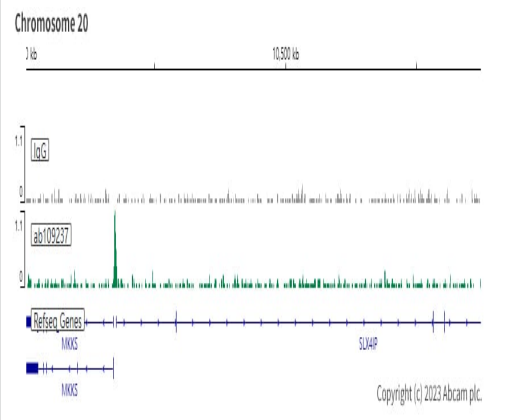
Target

Function Multifunctional transcription factor that exhibits positive and negative control on a large number of cellular and viral genes by binding to sites overlapping the transcription start site. May play an important role in development and differentiation. The function of YY1 as an activator or a repressor is specified by the presence of other proteins. For example it acts as a repressor in absence of adenovirus E1A protein but as an activator in its presence.

Sequence similarities Belongs to the YY transcription factor family.
Contains 4 C2H2-type zinc fingers.

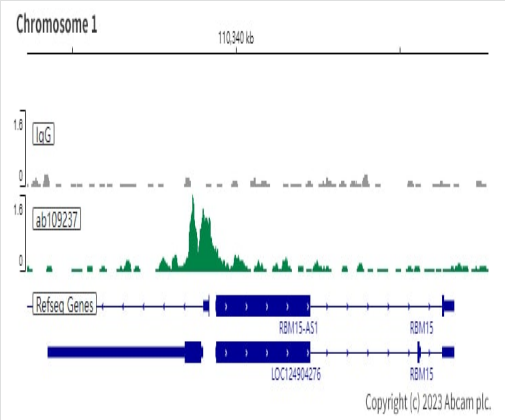
Cellular localization Nucleus matrix. Associated with the nuclear matrix.

Images



ChIC/CUT&RUN sequencing - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/µL, 2.5 x 10^5 K-562 (Human chronic myelogenous leukemia lymphoblast) cells and 5 µg of ab109237 [EPR4652]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



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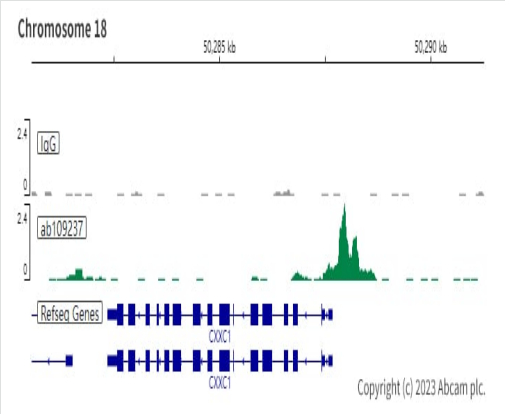

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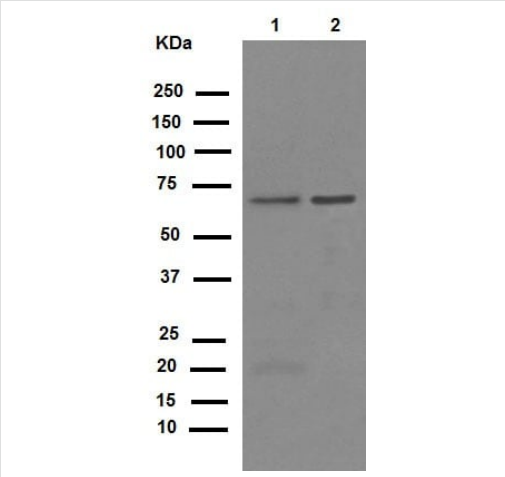


Western blot - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

All lanes : Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237) at 1/10000 dilution (purified)

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate
Lane 2 : Daudi (Human Burkitt's lymphoma cell line) cell lysate

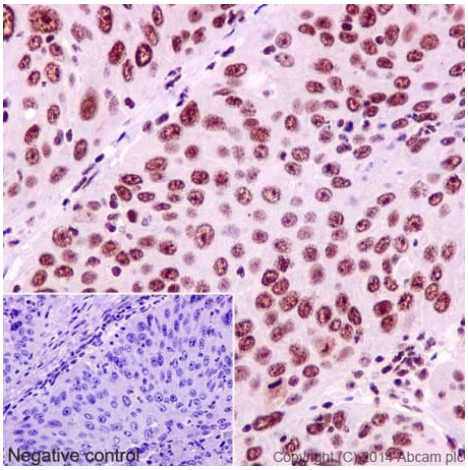
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 45 kDa
Observed band size: 68 kDa

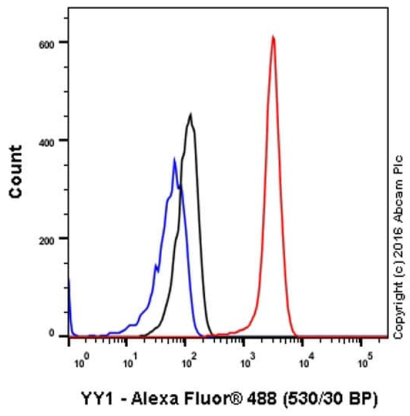
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervix carcinoma tissue labelling YY1 with purified ab109237 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

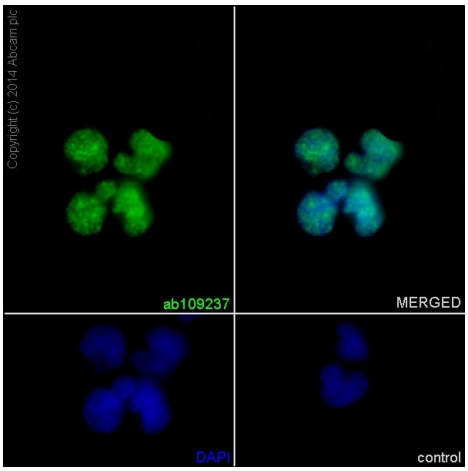


Flow Cytometry (Intracellular) - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

ab109237 staining YY1 in the human cell line HeLa (Human epithelial cell line from cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permiabilised with 90% methanol and the sample was incubated with the primary antibody at a dilution of 1/30. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black).

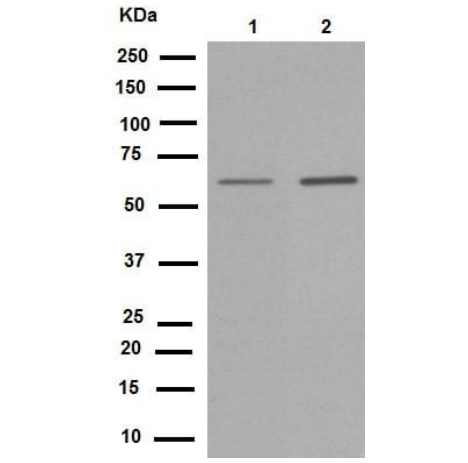
Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

Immunocytochemistry/Immunofluorescence analysis of HUT-78 cells labelling YY1 with purified ab109237 at 1/50. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

Control: primary antibody (1/50) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).



Western blot - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

All lanes : Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237) at 1/50000 dilution (purified)

Lane 1 : Y79 (Human retinoblastoma cell line) cell lysate
Lane 2 : HuT-78 cell lysate

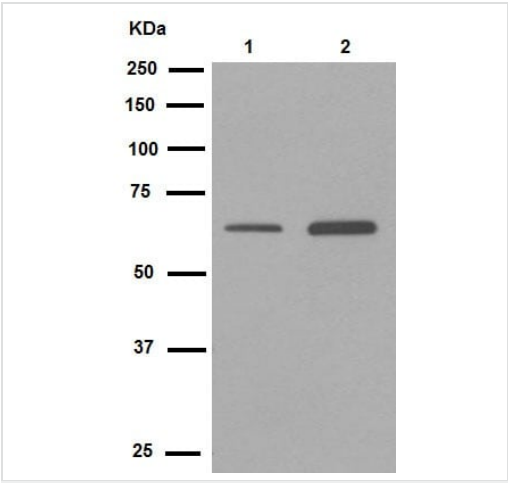
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 45 kDa
Observed band size: 68 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

All lanes : Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237) at 1/2000 dilution (purified)

Lane 1 : Mouse heart
Lane 2 : Rat heart

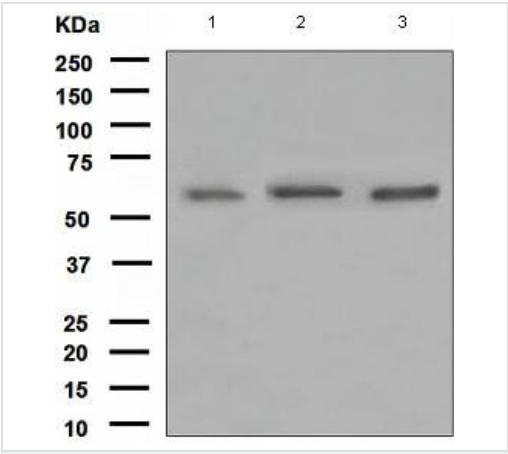
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 45 kDa
Observed band size: 68 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



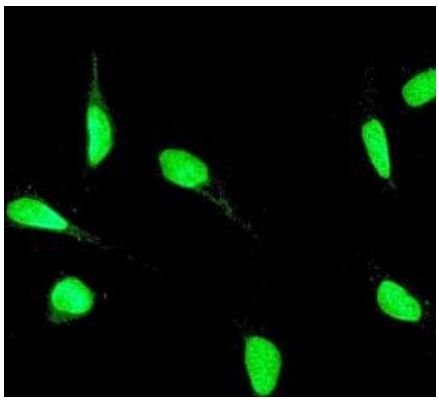
Western blot - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

All lanes : Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237) at 1/1000 dilution (unpurified)

Lane 1 : Daudi (Human Burkitt's lymphoma cell line) cell lysate
Lane 2 : Y79 (Human retinoblastoma cell line) cell lysate
Lane 3 : HuT-78 cell lysate

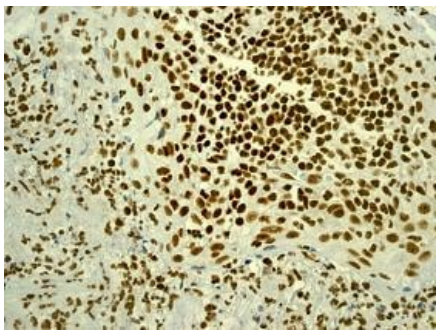
Lysates/proteins at 10 µg per lane.

Predicted band size: 45 kDa



Immunocytochemistry/ Immunofluorescence - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

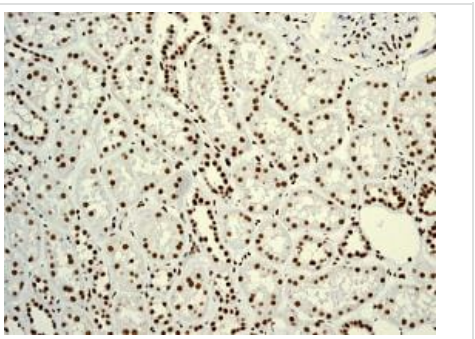
Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling YY1 with unpurified ab109237 at 1/100.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis human tonsil tissue labelling YY1 with unpurified ab109237 at 1/250.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis human kidney tissue labelling YY1 with unpurified ab109237 at 1/250.

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

Anti-YY1 antibody [EPR4652] - Nuclear Loading Control (ab109237)

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