abcam

Product datasheet

Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) ab150079

1 Abreviews 322 References 4 图像

概述

产品名称	**山羊抗兔**IgG H&L (Alexa Fluor® 647)
宿主	Goat
靶标种属	Rabbit
经测试应用	**适用于:** IHC-Fr, ICC/IF, ELISA, IHC-P, Flow Cyt
免疫原	The details of the immunogen for this antibody are not available.
偶联物	Alexa Fluor® 647. Ex: 652nm, Em: 668nm

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
存储溶液	Preservative: 0.02% Sodium azide Constituents: 23% Glycerol (glycerin, glycerine), PBS, 1% BSA
纯度	Immunogen affinity purified
纯化说明	This antibody was isolated by affinity chromatography using antigen coupled to agarose beads.
克隆	**多克隆**
同种型	IgG
常规说明	Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

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应用

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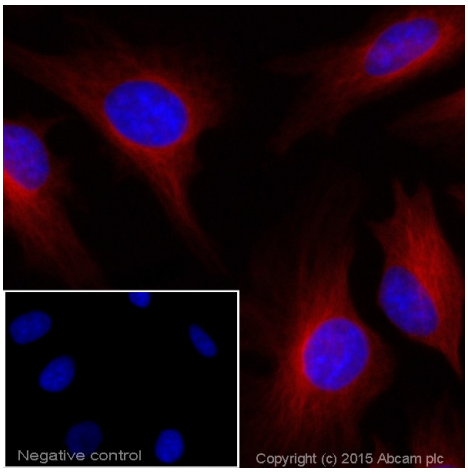
应用	Ab评论	说明
IHC-Fr	★★★☆☆ (1)	Use at an assay dependent concentration.
ICC/IF		1/200 - 1/1000.
ELISA		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
Flow Cyt		1/2000.

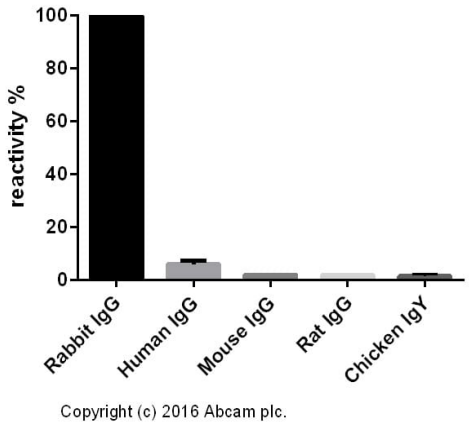
图片



Immunocytochemistry/ Immunofluorescence - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (ab150079)

ICC/IF image of **ab6046** in HeLa cells. The cells were 100% methanol fixed (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab6046**, 2µg/ml) overnight at +4°C. The secondary antibody ab150079 (shown in red) was used at 1µg/ml for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

The negative control (inset) is a secondary-only assay to demonstrate low non-specific binding of the secondary antibody.

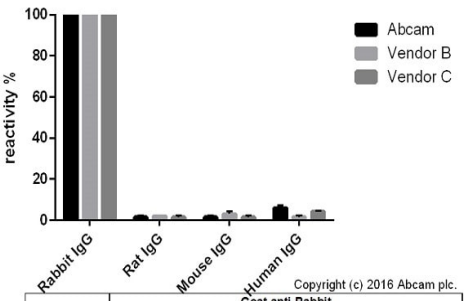


ELISA - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (ab150079)

Cross-reactivity of the polyclonal secondary antibody **ab182016** was tested using a sandwich ELISA approach. The wells were coated with the indicated IgG standards at 1 µg/ml (50 µl/well) and incubated overnight at 4°C, followed by a 5% BSA blocking step for 2h at RT. **ab182016** was then added starting at 1 µg/ml and gradually diluted 1/4 (50 µl/well), followed by incubation for 2h. For the detection Donkey anti-Goat IgG H&L (HRP) (**ab6885**) was used at 1/10,000 dilution (50 µl/well), followed by incubation for 1h at RT.

For the batch tested, ab182016 showed a cross-reactivity of 5-7% towards Human IgG and below 2% towards Mouse IgG, Rat IgG and Chicken IgY.

This data was developed using the unconjugated antibody (**ab182016**).

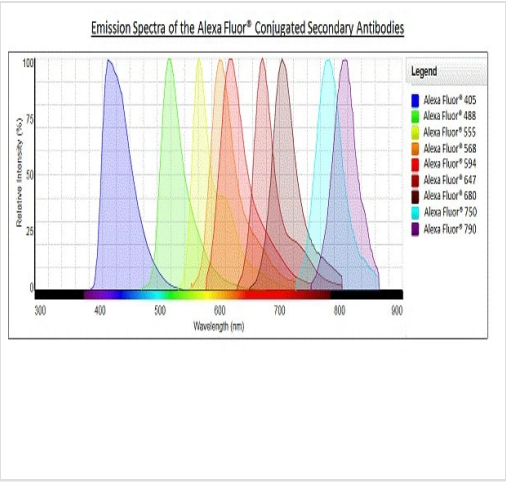


	Goat anti-Rabbit			
	Rabbit IgG	Rat IgG	Mouse IgG	Human IgG
Abcam	100%	<2%	<2%	5-7%
Vendor B	100%	2%	4%	<2%
Vendor C	100%	<2%	<2%	4-4.5%

ELISA - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (ab150079)

Cross-reactivity of Goat anti-Rabbit IgG H&L (**ab182016**) and Goat anti-Rabbit IgG H&L obtained from two different vendors was tested using a sandwich ELISA approach. The wells were coated with the indicated IgG standards (Rabbit, Human, Mouse and Rat) at 1 µg/ml (50 µl/well) and incubated overnight at 4°C, followed by a 5% BSA blocking step for 2h at RT. Secondary antibodies were then added starting at 1 µg/ml and gradually diluted 1/4 (50 µl/well), followed by incubation for 2h. For the detection Donkey anti-Goat IgG H&L (HRP) (**ab6885**) was used at 1/10,000 dilution (50 µl/well), followed by incubation for 1h at RT. This data is from a representative dilution.

This data was developed using the unconjugated antibody (**ab182016**).



Alexa Fluor® - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (ab150079)

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Product datasheet

Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) ab150080

★★★★★ 3 Abreviews 449 References 6 图像

概述

产品名称	**山羊抗兔**IgG H&L (Alexa Fluor® 594)
宿主	Goat
靶标种属	Rabbit
经测试应用	**适用于:** IHC-Fr, ICC/IF, ELISA, IHC-P, Flow Cyt
免疫原	Other Immunogen Type corresponding to Rabbit IgG.
偶联物	Alexa Fluor® 594. Ex: 590nm, Em: 617nm

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
存储溶液	Preservative: 0.02% Sodium azide Constituents: 23% Glycerol (glycerin, glycerine), PBS, 1% BSA
纯度	Immunogen affinity purified
纯化说明	The antibody was isolated by affinity chromatography using antigen coupled to agarose beads.
克隆	**多克隆**
同种型	IgG
常规说明	Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

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应用

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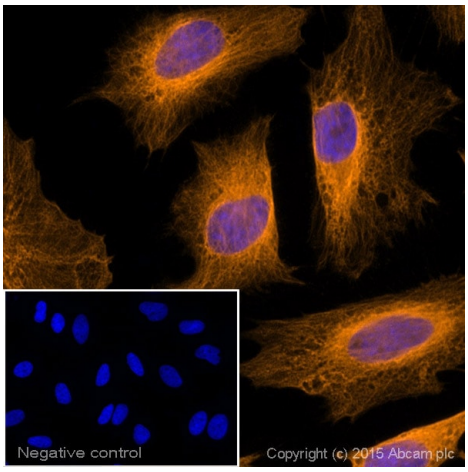
应用	Ab评论	说明
IHC-Fr	★★★★★ (1)	Use at an assay dependent concentration.
ICC/IF		1/200 - 1/1000.
ELISA		Use at an assay dependent concentration. Use at an assay dependent dilution
IHC-P	★★★★★ (1)	Use at an assay dependent concentration. Use at an assay dependent dilution
Flow Cyt		1/2000 - 1/4000.

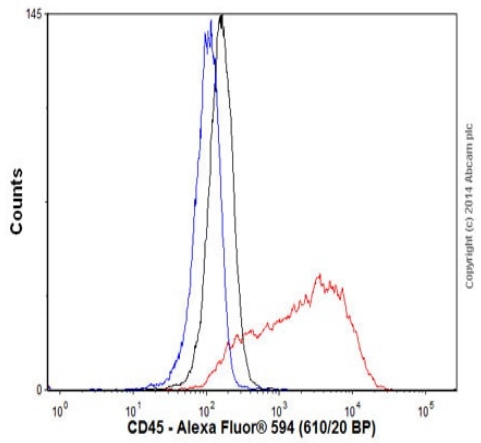
图片



Immunocytochemistry/ Immunofluorescence - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080)

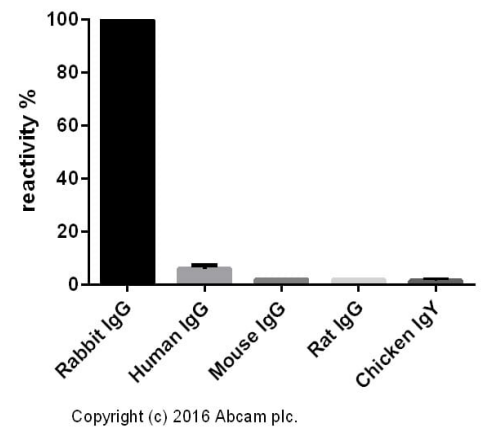
ICC/IF image of **ab6046** stained HeLa cells. The cells were 4% formaldehyde fixed (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then incubated in 1%BSA / 10% normal donkey serum / 0.3M glycine in 0.1% PBS-Tween for 1h to block non-specific protein-protein interactions. The cells were then incubated with the primary antibody (**ab6046**, 5µg/ml) overnight at +4°C. The secondary antibody (orange) was ab150080 Alexa Fluor® 4594 goat anti-rabbir IgG (H+L) used at 2µg/ml for 1h.DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

The negative control (inset) is a secondary-only assay to demonstrate low non-specific binding of the secondary antibody.



Flow Cytometry - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080)

Overlay histogram showing Jurkat cells stained with **ab40763** (red line). The cells were fixed with 4% paraformaldehyde (10 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 (**ab40763**, 1/1000 dilution) for 30 min at 22°C. The secondary antibody Goat anti-rabbit IgG H&L (Alexa Fluor® 594) (ab150080) was used at 1/4000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monclonal) (**ab172730**, 0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 561nm laser and 610/20 bandpass filter.

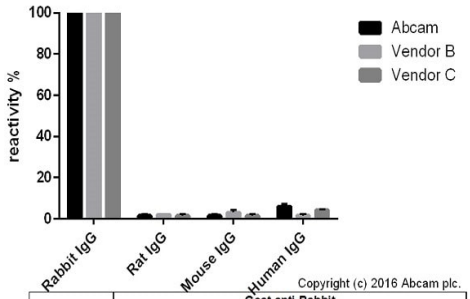


ELISA - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080)

Cross-reactivity of the polyclonal secondary antibody **ab182016** was tested using a sandwich ELISA approach. The wells were coated with the indicated IgG standards at 1 µg/ml (50 µl/well) and incubated overnight at 4°C, followed by a 5% BSA blocking step for 2h at RT. **ab182016** was then added starting at 1 µg/ml and gradually diluted 1/4 (50 µl/well), followed by incubation for 2h. For the detection Donkey anti-Goat IgG H&L (HRP) (**ab6885**) was used at 1/10,000 dilution (50 µl/well), followed by incubation for 1h at RT.

For the batch tested, ab182016 showed a cross-reactivity of 5-7% towards Human IgG and below 2% towards Mouse IgG, Rat IgG and Chicken IgY.

This data was developed using the unconjugated antibody (**ab182016**).

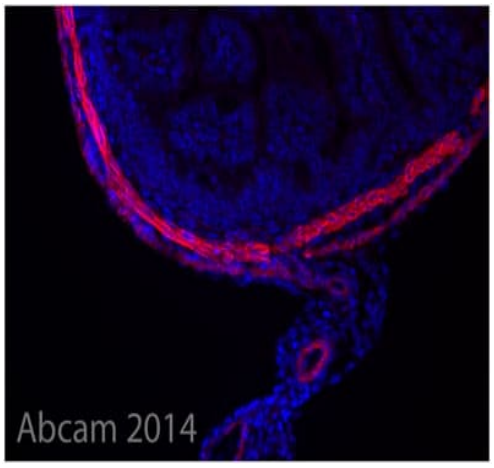


	Goat anti-Rabbit			
	Rabbit IgG	Rat IgG	Mouse IgG	Human IgG
Abcam	100%	<2%	<2%	5-7%
Vendor B	100%	2%	4%	<2%
Vendor C	100%	<2%	<2%	4-4.5%

ELISA - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080)

Cross-reactivity of Goat anti-Rabbit IgG H&L (**ab182016**) and Goat anti-Rabbit IgG H&L obtained from two different vendors was tested using a sandwich ELISA approach. The wells were coated with the indicated IgG standards (Rabbit, Human, Mouse and Rat) at 1 µg/ml (50 µl/well) and incubated overnight at 4°C, followed by a 5% BSA blocking step for 2h at RT. Secondary antibodies were then added starting at 1 µg/ml and gradually diluted 1/4 (50 µl/well), followed by incubation for 2h. For the detection Donkey anti-Goat IgG H&L (HRP) (**ab6885**) was used at 1/10,000 dilution (50 µl/well), followed by incubation for 1h at RT. This data is from a representative dilution.

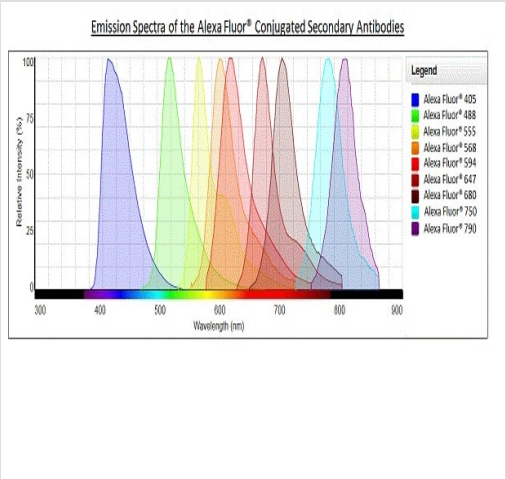
This data was developed using the unconjugated antibody (**ab182016**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080)

This image is courtesy of an anonymous abreview.

IHC-P image of alpha smooth muscle actin (**ab5694**) staining E16.5 mouse embryo gut. Paraformaldehyde fixed and paraffin embedded E16.5 mouse embryo gut sections were dewaxed and rehydrated before antigen retrieval (4 mins in a pressure cooker in 10mM Tris/0.4mM EDTA buffer pH 9.5). They were then incubated in 50mM NH_4Cl for 30 minutes and washed/blocked in 3x 10 minute washes of PBS containing 1% BSA + 0.2% gelatine and 0.05% saponin. Sections were incubated overnight with a primary antibody against alpha smooth muscle actin (**ab5694**), diluted 1/250 in PBS containing 0.1% BSA and 0.3% triton. After 3 x 10 minute washes in of PBS containing 0.1% BSA, 0.2% gelatine and 0.05% saponin, the sections were incubated for 1 hr in the secondary antibody (ab150080, diluted 1/400, shown in red) and then the 3 washes repeated. Sections were mounted in Vectashield with DAPI (blue).



Alexa Fluor® - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080)

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Product datasheet

Donkey Anti-Mouse IgG H&L (Alexa Fluor® 594) ab150108

★★★★★ 1 Abreviews 96 References 3 图像

概述

产品名称	驴抗小鼠IgG H&L (Alexa Fluor® 594)
宿主	Donkey
靶标种属	Mouse
经测试应用	**适用于:** IHC-Fr, ICC/IF, ELISA, IHC-P, Flow Cyt
免疫原	The details of the immunogen for this antibody are not available.
偶联物	Alexa Fluor® 594. Ex: 590nm, Em: 617nm

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
存储溶液	Preservative: 0.02% Sodium azide Constituents: 23% Glycerol (glycerin, glycerine), PBS, 1% BSA
纯度	Immunogen affinity purified
纯化说明	The antibody was isolated by affinity chromatography using antigen coupled to agarose beads.
克隆	**多克隆**
同种型	IgG
常规说明	Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

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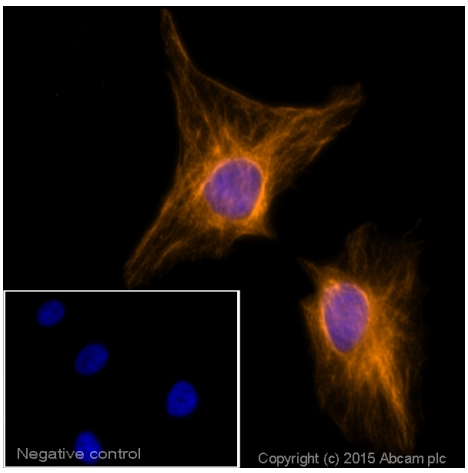
应用	Ab评论	说明
IHC-Fr		Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	1/200 - 1/1000.
ELISA		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
Flow Cyt		1/2000. **ab178000** - Mouse monoclonal IgG1 (Alexa Fluor® 594), is suitable for use as an isotype control to complement this secondary antibody.

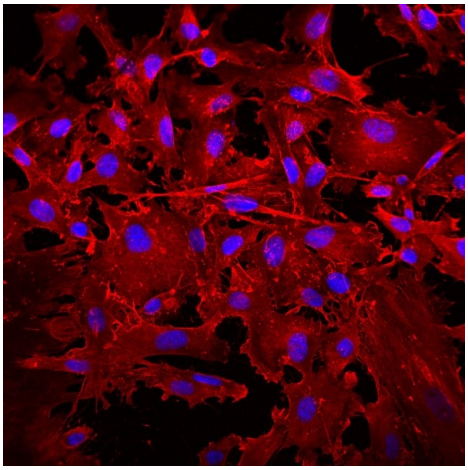
图片



Immunocytochemistry/ Immunofluorescence - Donkey Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150108)

ICC/IF image of **ab7291** stained HeLa cells. The cells were 100% methanol fixed (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then incubated in 1%BSA / 10% normal donkey serum / 0.3M glycine in 0.1% PBS-Tween for 1h to block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab7291**, 2µg/ml) overnight at +4°C. The secondary antibody (orange) was ab150108 Alexa Fluor® 594 donkey anti-mouse IgG (H+L) used at 1µg/ml for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

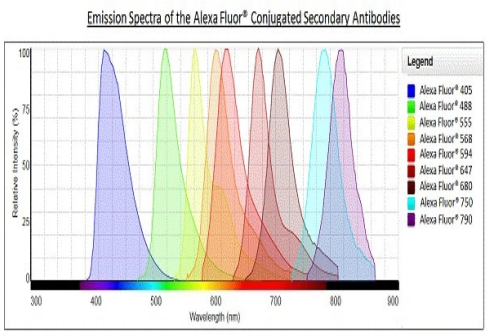
The negative control (inset) is a secondary-only assay to demonstrate low non-specific binding of the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Donkey Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150108)

This image is courtesy of an Abreview submitted by Sun Jeong Kim.

ab16287 staining SSEA4 in rat stem cells derived from tendon by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with parafolmaldehyde, permeabilized with PBS containing 0.25% Triton X-100 and blocked with 1% BSA for 30 minutes at room temperature. Samples were incubated with primary antibody (1/100) for 20 hour at 4°C. An Alexa Fluor® 594-conjugated donkey anti-mouse IgG H&L (ab150108) (1/1000) was used as the secondary antibody.



Alexa Fluor® - Donkey Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150108)

Emmission spectra of the Alexa Fluor® conjugated secondary antibodies.

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Product datasheet

Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) ab150113

15 Abreviews 927 References 8 图像

概述

产品名称	**山羊抗小鼠IgG H&L (Alexa Fluor® 488)**
宿主	Goat
靶标种属	Mouse
经测试应用	**适用于:** IHC-Fr, ICC/IF, ELISA, Flow Cyt, IHC-P
免疫原	Other Immunogen Type corresponding to Mouse IgG.
偶联物	Alexa Fluor® 488. Ex: 495nm, Em: 519nm

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
存储溶液	Preservative: 0.02% Sodium azide Constituents: 23% Glycerol (glycerin, glycerine), PBS, 1% BSA
纯度	Immunogen affinity purified
纯化说明	This antibody was isolated by affinity chromatography using antigen coupled to agarose beads.
克隆	**多克隆**
同种型	IgG
常规说明	Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

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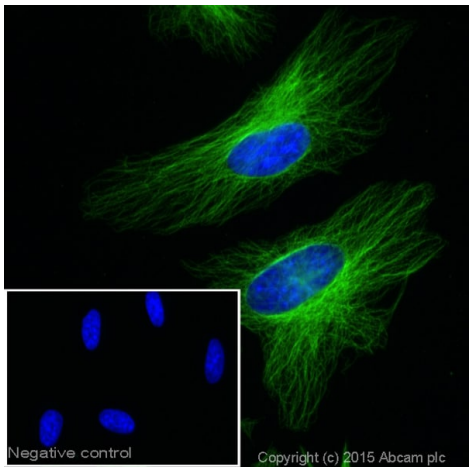
应用	Ab评论	说明
IHC-Fr	★★★★★ (3)	Use at an assay dependent concentration.
ICC/IF	★★★★★ (6)	1/200 - 1/1000.
ELISA		Use at an assay dependent concentration.
Flow Cyt		1/2000. **ab170190** - Mouse monoclonal IgG1 (Alexa Fluor® 488), is suitable for use as an isotype control to complement this secondary antibody.
IHC-P	★★★★★ (3)	Use at an assay dependent concentration.

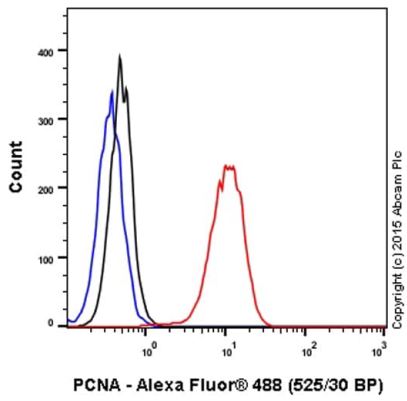
图片



Immunocytochemistry/ Immunofluorescence - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

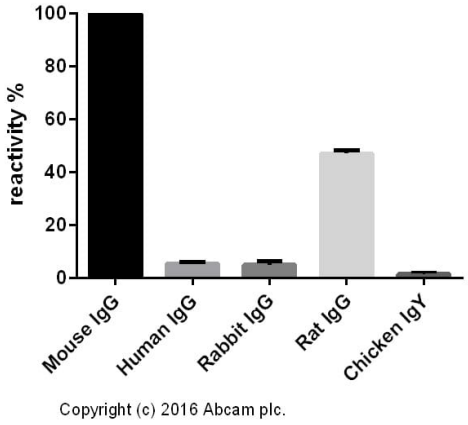
ICC/IF image of **ab7291** stained HeLa cells. The cells were 100% methanol fixed (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab7291**, 1µg/ml) overnight at +4°C. The secondary antibody (green) was ab150113 Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at 2µg/ml for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

The negative control (inset) is a secondary-only assay to demonstrate low non-specific binding of the secondary antibody.



Flow Cytometry - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

Overlay histogram showing HeLa cells stained with **ab29** (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween 20 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 (**ab29**, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (**ab91361**, 0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

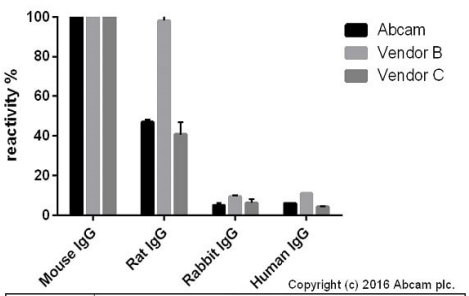


ELISA - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

Cross-reactivity of the polyclonal secondary antibody **ab182017** was tested using a sandwich ELISA approach. The wells were coated with the indicated IgG standards at 1 µg/ml (50µl/well) and incubated overnight at 4°C, followed by a 5% BSA blocking step for 2h at RT. **ab182017** was then added starting at 1 µg/ml and gradually diluted 1/4 (50 µl/well), followed by incubation for 2h. For the detection Donkey anti-Goat IgG H&L (HRP) (**ab6885**) was used at 1/10,000 dilution (50 µl/well), followed by incubation for 1h at RT.

For the batch tested, ab182017 showed a cross-reactivity below 2% towards Chicken IgY, 6% towards Human IgG, 7% towards Rabbit IgG and 47% towards Rat IgG.

These data were developed using the unconjugated antibody (**ab182017**).

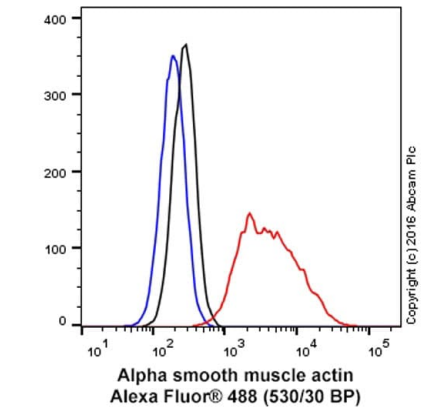


	Goat anti-Rabbit			
	Mouse IgG	Rat IgG	Rabbit IgG	Human IgG
Abcam	100%	46-48%	4-6%	6%
Vendor B	100%	96-100%	9-10%	11%
Vendor C	100%	36-45%	5-7%	4-5%

ELISA - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

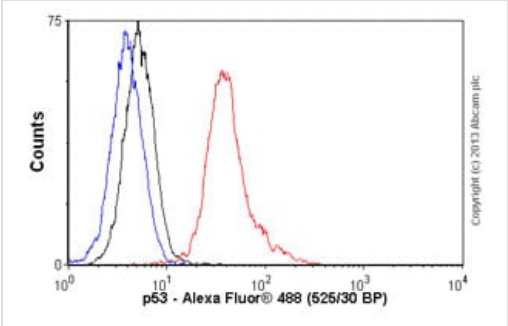
Cross-reactivity of Goat anti-Mouse IgG H&L (**ab182017**) and Goat anti-Mouse IgG H&L obtained from two different vendors was tested using a sandwich ELISA approach. The wells were coated with the indicated IgG standards (Rabbit, Human, Mouse and Rat) at 1 µg/ml (50µl/well) and incubated overnight at 4°C, followed by a 5% BSA blocking step for 2h at RT. Secondary antibodies were then added starting at 1 µg/ml and gradually diluted 1/4 (50 µl/well), followed by incubation for 2h. For the detection Donkey anti-Goat IgG H&L (HRP) (**ab6885**) was used at 1/10,000 dilution (50 µl/well), followed by incubation for 1h at RT. This data is from a representative dilution.

These data were developed using the unconjugated antibody (**ab182017**).



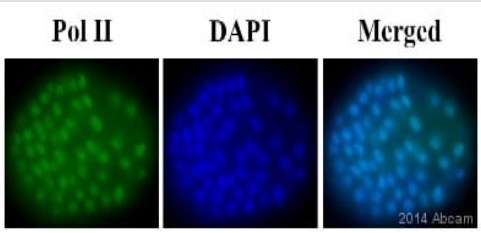
Flow Cytometry - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

Overlay histogram showing SV40LT-SMC cells stained with **ab7817** (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (**ab7817**, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113) at 1/2000 dilution for 30 min at 22°C Isotype control antibody (black line) was mouse IgG2a [18C8BC7AD10] (**ab170191**) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.
Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.
This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



Flow Cytometry - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

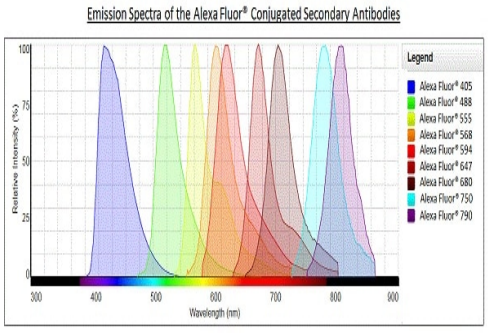
Overlay histogram showing HeLa cells stained with **ab26** (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (**ab26**, 1µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) at 1/2000 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



IHC - Wholemount - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

This image is courtesy of an anonymous Abreview.

IHC - Wholemount of Caenorhabditis elegans embryo labelling RNA polymerase II CTD repeat YSPTSPS with **ab817**. Sample was incubated with primary antibody (1/100 in PBS + 3% BSA + 0.1% Triton-X 100) for 24 hours at 4°C. ab150113, an Alexa Fluor® 488-conjugated goat anti-mouse IgG polyclonal (undiluted) was used as the secondary antibody.



Alexa Fluor® - Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113)

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Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488

Product Details	
Size	1 mg
Species Reactivity	Rabbit
Host/Isotype	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Immunogen	Gamma Immunoglobins Heavy and Light chains
Form	liquid
Concentration	2 mg/mL
Purification	purified
Storage buffer	PBS, pH 7.5
Contains	5mM sodium azide
Storage conditions	4° C, store in dark
RRID	AB_143165

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	Assay-dependent	-
Immunocytochemistry (ICC/IF)	4 µg/mL	-
Flow Cytometry (Flow)	1-10 µg/mL	-

Product Specific Information

Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor™ 488 dye is a bright, green-fluorescent dye with excitation ideally suited to the 488 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 488 dye is pH-insensitive over a wide molar range. Probes with high fluorescence quantum yield and high photostability allow detection of low-abundance biological structures with great sensitivity. Alexa Fluor 488 dye molecules can be attached to proteins at high molar ratios without significant self-quenching, enabling brighter conjugates and more sensitive detection. The degree of labeling for each conjugate is typically 2-8 fluorophore molecules per IgG molecule; the exact degree of labeling is indicated on the certificate of analysis for each product lot.

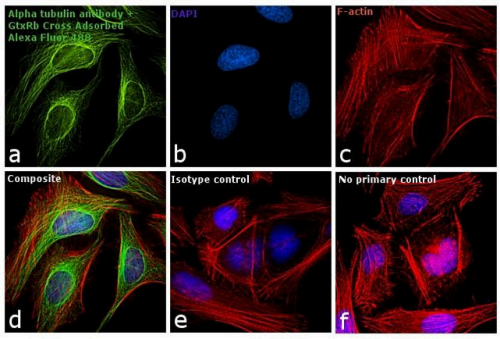
The goat anti-rabbit IgG whole antibody conjugates are most commonly prepared by immunizing the host animal with a pooled population of immunoglobulins from the target species and can be further purified and modified (e.g., immunoaffinity chromatography, antibody fragmentation, label conjugation, etc.) to generate highly specific reagents. In the first round of purification, whole immunoglobulins binding to the immunizing antibody are recovered and mainly consist of the ~150-kDa IgG class. Further purification with Protein A or G removes all immunoglobulin classes except IgG such that the affinity-purified antibodies react with IgG heavy chains and all classes of immunoglobulin light chains from rabbit. To minimize cross-reactivity, these goat anti-rabbit whole antibodies have been cross-adsorbed against human IgG, human serum, mouse IgG, mouse serum, and bovine serum. Cross-adsorption or pre-adsorption is a purification step to increase specificity of the antibody resulting in higher sensitivity and less background staining. The secondary antibody solution is passed through a column matrix containing

immobilized serum proteins from potentially cross-reactive species. Only the nonspecific-binding secondary antibodies are captured in the column, and the highly specific secondaries flow through. The benefits of this extra step are apparent in multiplexing/multicolor-staining experiments where there is potential cross-reactivity with other primary antibodies or in immunohistochemistry experiments where there are may be the presence of endogenous immunoglobulins. For a highly cross-adsorbed secondary antibody equivalent (or equivalent secondary antibody preparation), please see product catalog number: A11034.

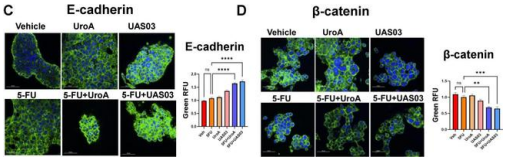
Using conjugate solutions: Centrifuge the protein conjugate solution briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step will eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining. Because staining protocols vary with application, the appropriate dilution of antibody should be determined empirically. For the fluorophore-labeled antibodies a final concentration of 1-10 µg/mL should be satisfactory for most immunohistochemistry and flow cytometry applications.

Product will be shipped at Room Temperature.

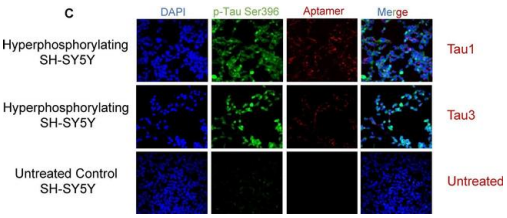
Product Images For Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11008) in ICC/IF
Immunofluorescence analysis of Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody Alexa Fluor® 488 conjugate was performed using HeLa cells stained with alpha Tubulin Rabbit Polyclonal Antibody (Product # PA5-16891). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, blocked with 1% BSA for 1 hour and labeled with 2 µg /mL Rabbit primary antibody for 3 hours at room temperature. Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody Alexa Fluor® 488 conjugate (Product # A-11008) was used at a concentration of 4 µg/mL in phosphate buffered saline containing 0.2% BSA for 45 minutes at room temperature, for detection of alpha Tubulin in the cytoplasm (Panel a: green). Nuclei (Panel b: blue) were stained with DAPI in SlowFade® Gold Antifade Mountant (Product # S36938). F-actin was stained with Rhodamine Phalloidin (Product # R415, 1:300) (Panel c: red). Panel d represents the composite image. No nonspecific staining was observed with the secondary antibody alone (panel f), or with an isotype control (panel e). The images were captured at 60X magnification.



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11008) in ICC/IF
5FU modulates EMT markers upon co-treatment with UroA/UAS03. A. Western blot analysis of EMT makers in HCT-116 parental and HCT-116-FUR cells. B. Western blot analysis of EMT makers in HCT-116-FUR cells treated with 5-FU (50 µM) in the presence of UroA (50 µM) or UAS03 (50 µM). C-D. HCT-116-FUR cells were grown on 8 well chamber slide and treated with either 5FU (50 µM), UroA (50 µM), UAS03 (50 µM) or 5FU (50 µM) in combination of UroA (50 µM) or UAS03 (50 µM) for 24 h. The cells were stained with either anti-E cadherin (C) or catenin (D) followed by secondary antibody tagged with Alexa-488. Nucleus was stained using DAPI. The confocal images were captured. Scale bars indicate 50 µm. E. Total RNA was isolated from HCT-116-FUR cells and analyzed for the expression of E-cadherin, ZO-1, -catenin and Snail. The fold changes in mRNA levels were determined by RT PCR method. Error bars, ±SEM. Statistics performed one-way ANOVA using Graph Prism Software. ns: non-significant, *p < 0.05, **p < 0.01, ***p < 0.001. Image collected and cropped by CiteAb from the following publication (), licensed under a CC BY license.



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11008) in ICC/IF
Cell-SELEX to identify biomarkers onset of AD. The cell-SELEX methodology modified to capture membrane binding aptamers was used to identify aptamers that specifically bind hyperphosphorylative neurons. Okadaic acid treated differentiated SH-SY5Y cells were used as a surrogate for hyperphosphorylative neurons to screen DNA aptamers that specifically recognize the differences between the surfaces of treated and untreated cells. (A) Pictorial representation of the cell-SELEX process. (B) Abundance of the top 23 sequences from SELEX cycle 1 - 26. Note that the fractions are low until about cycle 10, when they increase sharply. Note that the abundance of Tau 1, Tau 3 continually increase with increasing cycle number. (C) Hyperphosphorylated SH-SY5Y cells stained with 50nM Cy5 labelled Tau1, Tau3 aptamer for 2h, compared to an untreated control (lower row), imaged with a 40X objective. Image collected and cropped by CiteAb from the following publication (), licensed under a CC BY license.

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8172 References

The utility and caveat of split-GAL4s in the study of neurodegeneration. Fly (Austin) (2023)

Toxicity of C9orf72-associated dipeptide repeat peptides is modified by commonly used protein tags. Life Sci Alliance (2023)

Bone marrow adipocytes alteration in an in vitro model of Gaucher Disease. Mol Genet Metab Rep (2023)

Lentinan induces apoptosis of mouse hepatocellular carcinoma cells through the EGR1/PTEN/AKT signaling axis. Oncol Rep (2023)

Oncogenic BRAFV600E induces microglial proliferation through extracellular signal-regulated kinase and neuronal death through c-Jun N-terminal kinase. Neural Regen Res (2023)

Revision 1

#2750 Store at -20C

Oct-4 Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P, IF-IC, FC-FP, ChIP	H	Endogenous	45	Rabbit	#Q01860	5460

Product Usage Information

For optimal ChIP results, use 20 µl of antibody and 10 µg of chromatin (approximately 4 x 10^6 cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

Application	Dilution
Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:800
Immunofluorescence (Immunocytochemistry)	1:200
Flow Cytometry (Fixed/Permeabilized)	1:400
Chromatin IP	1:25

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Oct-4 Antibody detects endogenous levels of total Oct-4 protein.

Species predicted to react based on 100% sequence homology:

Monkey

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acids near the carboxy terminus of human Oct-4. Antibodies are purified by peptide affinity chromatography.

Background

Oct-4 (POU5F1) is a transcription factor highly expressed in undifferentiated embryonic stem cells and embryonic germ cells (1). A network of key factors that includes Oct-4, Nanog, and Sox2 is necessary for the maintenance of pluripotent potential, and downregulation of Oct-4 has been shown to trigger cell differentiation (2,3). Research studies have demonstrated that Oct-4 is a useful germ cell tumor marker (4). Oct-4 exists as two splice variants, Oct-4A and Oct-4B (5). Recent studies have suggested that the Oct-4A isoform has the ability to confer and sustain pluripotency, while Oct-4B may exist in some somatic, non-pluripotent cells (6,7).

Background References

1. Looijenga, L.H. et al. (2003) *Cancer Res* 63, 2244-50.
2. Pesce, M. and Schöler, H.R. (2001) *Stem Cells* 19, 271-278.
3. Pan, G. and Thomson, J.A. (2007) *Cell Res* 17, 42-9.
4. Cheng, L. et al. (2007) *J Pathol* 211, 1-9.
5. Takeda, J. et al. (1992) *Nucleic Acids Res* 20, 4613-20.
6. Cauffman, G. et al. (2006) *Stem Cells* 24, 2685-91.
7. Lee, J. et al. (2006) *J Biol Chem* 281, 33554-65.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)
IF-IC: Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)
ChIP: Chromatin IP

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken
Dm: D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae
Ce: C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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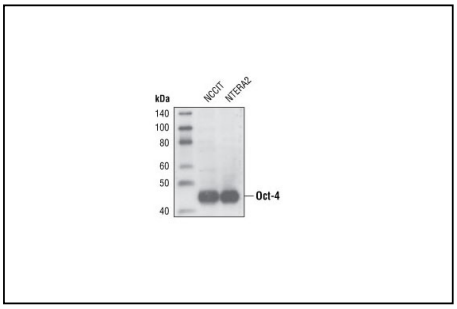
Revision 1

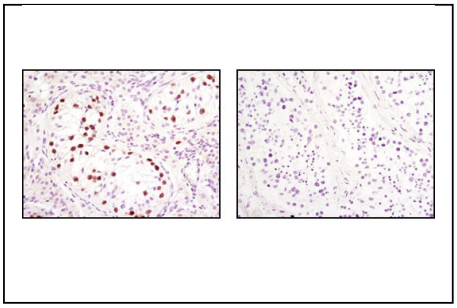
#2750

Oct-4 Antibody

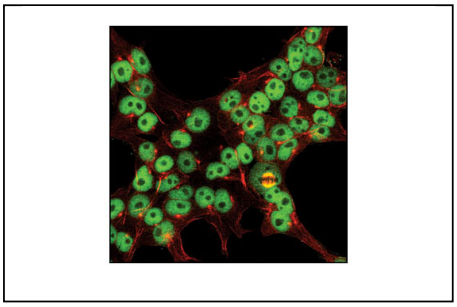
Western blot analysis of NCCIT and NTERA2 cell extracts using Oct-4 Antibody.



Immunohistochemical analysis of paraffin-embedded human seminoma (left) or normal testis (right), showing nuclear localization using Oct-4 Antibody.



Confocal immunofluorescent analysis of NCCIT cells using Oct-4 Antibody (green) and β-Tubulin (9F3) Rabbit mAb (Alexa Fluor® 555 Conjugate) #2116 (red).

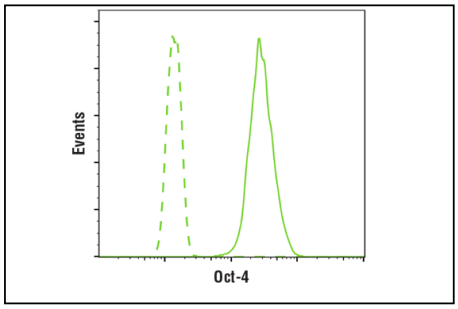


Revision 1

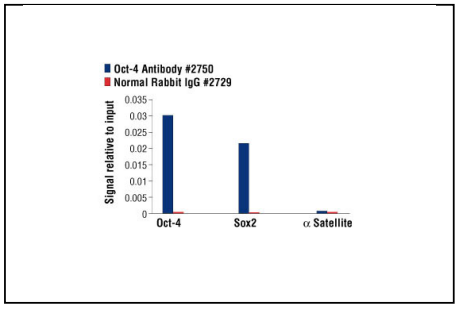
#2750

Oct-4 Antibody

Flow cytometric analysis of NCCIT cells using Oct-4 Antibody (solid line) compared to concentration-matched Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (dashed lines). Anti-rabbit IgG (H+L), F(ab')2 Fragment (Alex Fluor® 488 Conjugate) #4412 was used as a secondary antibody.



Chromatin immunoprecipitations were performed with cross-linked chromatin from NCCIT cells and either Oct-4 Antibody #2750 or Normal Rabbit IgG #2729 using SimpleChIP® Enzymatic Chromatin IP Kit (Magnetic Beads) #9003. The enriched DNA was quantified by real-time PCR using SimpleChIP® Human Oct-4 Promoter Primers #4641, SimpleChIP® Human Sox2 Promoter Primers #4649, and SimpleChIP® Human α Satellite Repeat Primers #4486. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the total amount of input chromatin, which is equivalent to one.



abcam

Product datasheet

Anti-SSEA4 antibody [MC813-70] ab16287

11 Abreviews 165 References 7 图像

概述

产品名称	Anti-SSEA4抗体[MC813-70]
描述	**小鼠单克隆抗体**[MC813-70] to SSEA4
宿主	Mouse
经测试应用	**适用于:** ICC/IF, Flow Cyt
种属反应性	**与反应:** Human **预测可用于:** Mouse, Rat
免疫原	Tissue, cells or virus corresponding to Human SSEA4. Human embryonal carcinoma cell line 2102Ep
常规说明	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.02% Sodium azide
纯度	Tissue culture supernatant
纯化说明	Tissue culture supernatant was cross flow concentrated.
克隆	单克隆
克隆编号	MC813-70
骨髓瘤	Sp2/0

同种型	IgG3
轻链类型	kappa

应用

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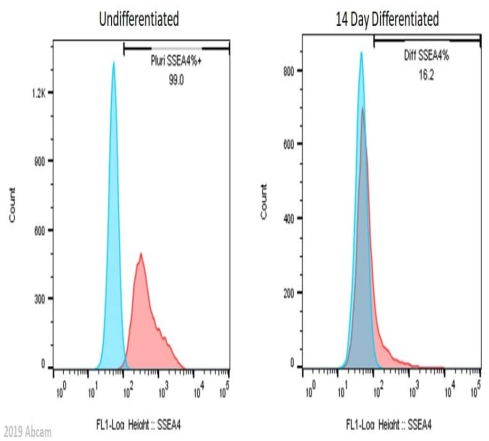
应用	Ab评论	说明
ICC/IF	★★★★☆ (8)	Use at an assay dependent concentration.
Flow Cyt	★☆☆☆☆ (2)	Use at an assay dependent concentration. **ab18392** - Mouse monoclonal IgG3, is suitable for use as an isotype control with this antibody.

靶标

相关性 Glycosphingolipids function as mediators of cell adhesion and are modulators of signal transduction. SSEA-4 (Stage-Specific Embryonic Antigen 4) is a glycolipid expressed early in embryonic development and in pluripotent stem cells. This antibody was first described and named as part of a series of embryonic antigens, defined by monoclonal antibodies isolated in the lab of Prof. Davor Solter (Kannagi, R. et al., 1983, EMBO J. 2:2355). SSEA-4 can be used as a marker of human embryonic stem cells, human embryonic carcinoma cells and human embryonic germ cells. Monoclonal antibodies to this target have been widely used in the characterization of pluripotent stem cells. Mouse pluripotent stem cells are not recognised by anti-SSEA-4 antibodies but do express the antigen upon differentiation.

细胞定位 Cell Membrane

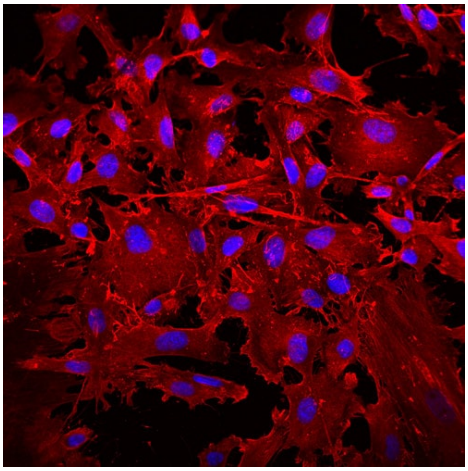
图片



Flow Cytometry - Anti-SSEA4 antibody [MC813-70] (ab16287)

This image is courtesy of Professor Chris Denning's lab, University of Nottingham

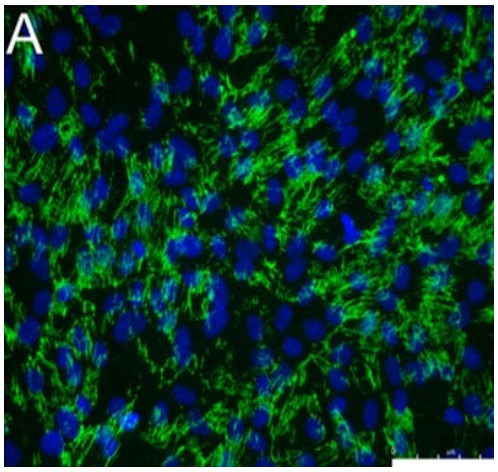
Human induced pluripotent stem cells (iPSCs) stained with ab16287 (red fill) with secondary only control (blue fill). In brief, iPSCs were fixed in 4% formaldehyde (methanol-free) for 15 min at 25°C. Cells were then incubated with the antibody (ab16287, 1/9600 dilution) for 30 min at 4°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG at 1/1000 dilution for 30 min at 4°C. iPSCs differentiated for 14 days toward a cardiomyocyte lineage were used as a negative control. Acquisition of >20,000 total events were collected using a 100mW solid state diode laser (488nm) and 529/28 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Anti-SSEA4 antibody [MC813-70] (ab16287)

This image is courtesy of an Abreview submitted by Sun Jeong Kim

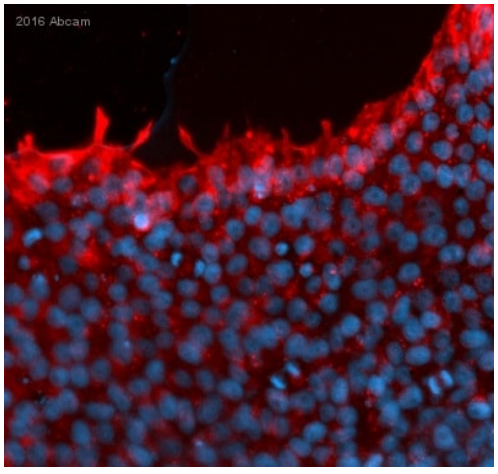
ab16287 staining SSEA4 in rat tendon derived stem cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.25% Triton X-100 in PBS and blocked with 1% BSA for 30 minutes at room temperature. Samples were incubated with primary antibody (1/100) for 20 hours at 4°C. An Alexa Fluor® 594-conjugated donkey anti-mouse IgG polyclonal (1/1000) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-SSEA4 antibody [MC813-70] (ab16287)

Image from Ferro F et al., PLoS One. 2012;7(7):e41774. Epub 2012 Jul 23. Fig 6.; doi:10.1371/journal.pone.0041774; July 23, 2012, PLoS ONE 7(7): e41774.

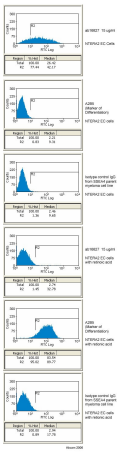
Immunofluorescence analysis of Human dental pulp stem cells, staining SSEA4 with ab16287 at 1/40 dilution. A FITC-conjugated anti-mouse IgG was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-SSEA4 antibody [MC813-70] (ab16287)

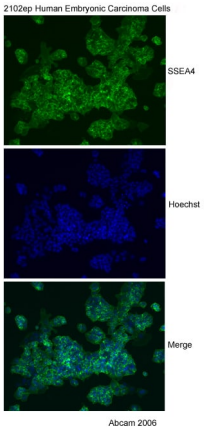
This image is courtesy of an abreview submitted by Vladimir Milenkovic, University Hospital Regensburg, Germany

Immunocytochemistry/ Immunofluorescence analysis of human iPSC cells labeling SSEA4 with ab16287 at 1/500 dilution. Cells were fixed with paraformaldehyde and permeabilized with 0.5% TX100. Cells were blocked with 5% serum for 20 minutes at 25°C. A goat polyclonal anti-mouse Cy3 secondary antibody at 1/500 dilution was used.



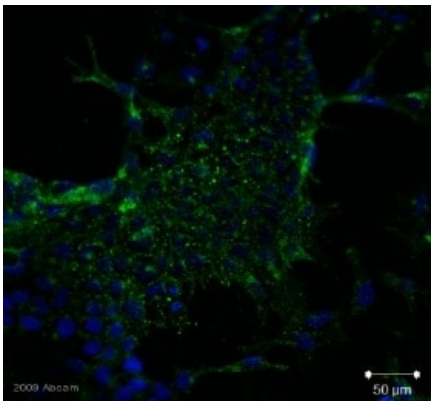
Flow Cytometry - Anti-SSEA4 antibody [MC813-70] (ab16287)

anti-SSEA4 antibody, **ab16297** can be used as a marker of Embryonic Carcinoma cells in Flow Cytometry/FACS. As can be seen from the histograms, in non-differentiating conditions (i.e. without retinoic acid) NTERA2 cells were recognised by **ab16297**. However, upon differentiation (addition of retinoic acid), the antibody lost the ability to recognise the cells.



Immunocytochemistry/ Immunofluorescence - Anti-SSEA4 antibody [MC813-70] (ab16287)

2102ep Human Embryonic Carcinoma cells were stained with SSEA4 antibody ab16287. As expected, staining localised to the cell surface (green). Nuclei are stained blue using Hoechst.



Immunocytochemistry/ Immunofluorescence - Anti-SSEA4 antibody [MC813-70] (ab16287)

This image is a courtesy of Fiona Lewis

ab16287 staining SSEA4 in human Embryonic Stem Cells, HUES7 by Immunocytochemistry/ Immunofluorescence. Cells were fixed with paraformaldehyde, permeabilized with Triton and blocking with 10% serum for 1 hour was performed. Samples were incubated with primary antibody (1/100: in 1% serum, 0.1% Triton in PBS) for 1 hour at 37°C. An Alexa Fluor® 588-conjugated goat polyclonal to mouse IgG was used at dilution at 1/100 as secondary antibody.

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Product datasheet

Anti-SOX2 antibody [20G5] ab171380

★★★★★ 1 Abreviews 48 References 8 图像

概述

产品名称	Anti-SOX2抗体[20G5]
描述	**小鼠单克隆抗体**[20G5] to SOX2
宿主	Mouse
经测试应用	**适用于:** IHC-P, IP, WB, Flow Cyt, ICC/IF
种属反应性	**与反应:** Mouse, Human **预测可用于:** Sheep, Chicken, Xenopus laevis, Zebrafish, Xenopus tropicalis
免疫原	Recombinant full length protein corresponding to Human SOX2 aa 1-317. Expressed in bacteria. Database link: **6657**
阳性对照	IHC-P: Human lung squamous carcinoma tissue. Mouse esophagus tissue. ICC/IF: H9 embryonic stem cells. HEL 11.4 induced IPS cells. IP: NCCIT whole cell lysate. WB: NCCIT and NTERRA cell lysate. Flow Cytometry: H9 embryonic stem cells. HEL 11.4 induced IPS cells.
常规说明	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.05% Sodium azide Constituents: PBS, 30% Glycerol, 0.1% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	20G5
同种型	IgG1

轻链类型	kappa

应用

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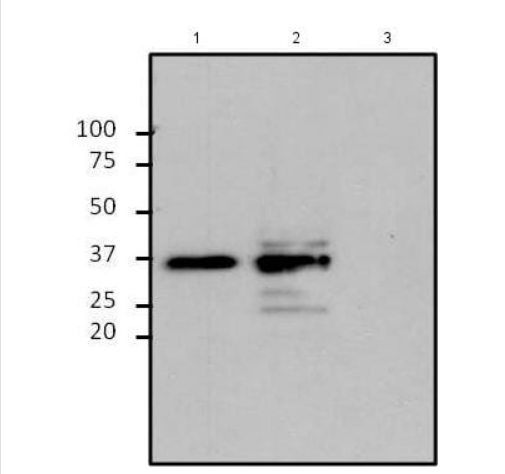
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	★★★★★ (1)	1/20 - 1/200.
IP		Use at 5 µg/mg of lysate.
WB		1/1000 - 1/2000. Predicted molecular weight: 34 kDa.
Flow Cyt		1/100. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		1/200.

靶标

功能	Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency.
疾病相关	Defects in SOX2 are the cause of microphthalmia syndromic type 3 (MCOPS3) [MIM:206900]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS3 is characterized by the rare association of malformations including uni- or bilateral anophthalmia or microphthalmia, and esophageal atresia with trachoesophageal fistula.
序列相似性	Contains 1 HMG box DNA-binding domain.
翻译后修饰	Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.
细胞定位	Nucleus.

图片



Western blot - Anti-SOX2 antibody [20G5] (ab171380)

All lanes : Anti-SOX2 antibody [20G5] (ab171380) at 1/500 dilution

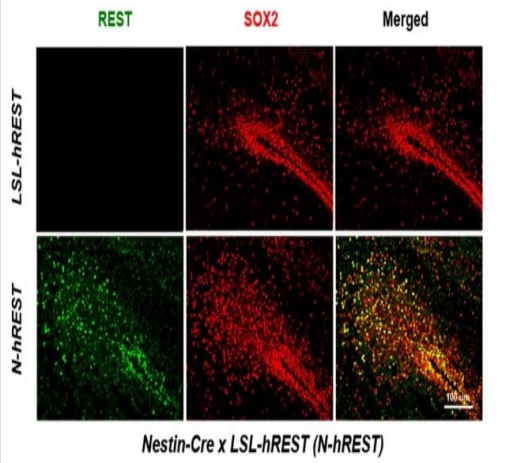
Lane 1 : NCCIT (Human pluripotent embryonic carcinoma cell line) cell lysate
Lane 2 : NTERRA cell lysate
Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate

Lysates/proteins at 25 µg per lane.

Secondary
All lanes : mouse IgG-HRP at 1/10000 dilution

Developed using the ECL technique.

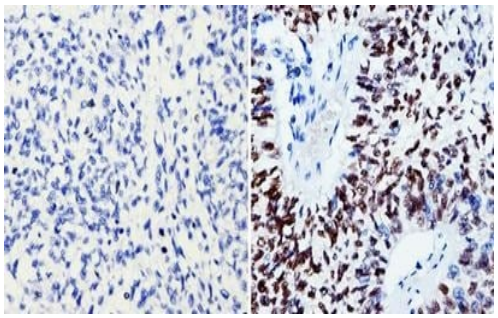
Predicted band size: 34 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [20G5] (ab171380)

REST expression in *N-hREST* mouse brains correlates with stemness in embryonic neural stem cells. Immunofluorescence analysis of E18.5 *N-hREST* and *LSL-hREST* control littermate mouse brains with antibodies against REST (using an antibody that preferentially recognizes hREST over mouse REST) and SOX2 (using ab171380).

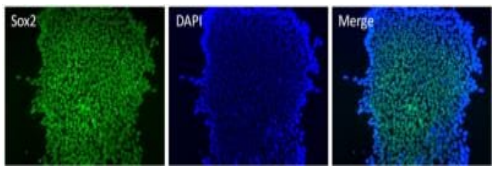
Mice were anesthetized and perfused with phosphate-buffered saline followed by 4% paraformaldehyde (PFA). Brain tissues were then dissected and fixed in 4% PFA overnight at 4 °C. Fixed brain tissues were processed for paraffin embedding and then cut into 5-µm sections.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [20G5] (ab171380)

Immunohistochemistry analysis of SOX2 showing staining in the nucleus of paraffin-treated human lung squamous carcinoma (right) compared with a negative control without primary antibody (left).

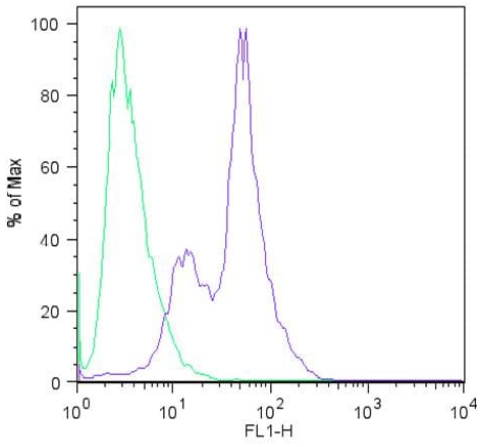
To expose target proteins, antigen retrieval was performed using 10 mM sodium citrate (pH 6.0), microwaved for 8-15 minutes. Following antigen retrieval, tissues were blocked in 3% H_2O_2-methanol for 15 minutes at room temperature, washed with ddH_2O and PBS, and then probed with a SOX2 monoclonal antibody (ab171380) diluted by 3% BSA-PBS at a dilution of 1:200 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [20G5] (ab171380)

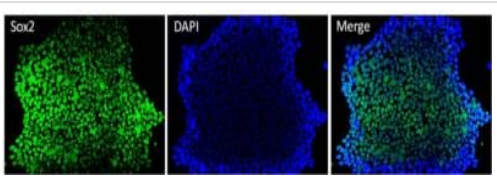
Immunofluorescence analysis of formaldehyde-fixed H9 embryonic stem cells, labeling SOX2 using ab171380 (left panel) at a 1/200 dilution overnight.

DAPI was used to stain the cell nuclei (central panel). Slides were washed with PBS and incubated with a fluorescein-conjugated secondary antibody at a 1/100 dilution.



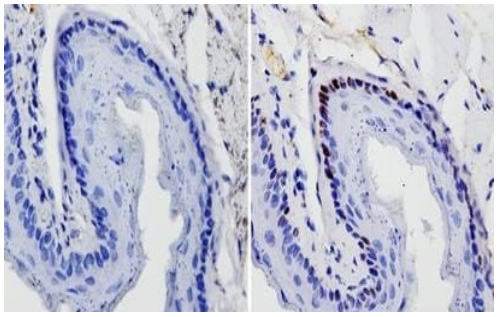
Flow Cytometry - Anti-SOX2 antibody [20G5] (ab171380)

Flow cytometry analysis of H9 embryonic stem cells labeling SOX2 (blue histogram), using ab171380 at a 1/100 dilution, or a mouse IgG (green histogram) at a 1/100 dilution. A fluorescein-conjugated secondary antibody at a 1/200 dilution was used for the analysis.



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [20G5] (ab171380)

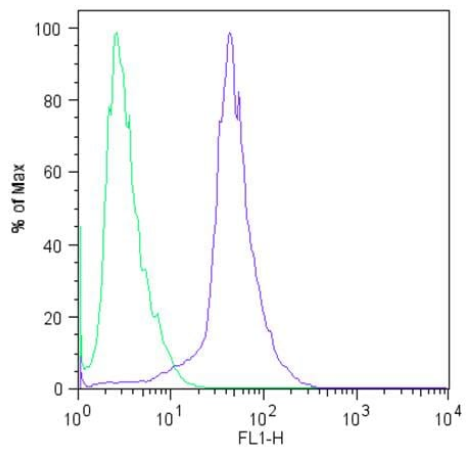
Immunofluorescence analysis of formaldehyde-fixed HEL 11.4 induced IPS cells, labeling SOX2 using ab171380 (left panel) at a 1/200 dilution overnight. DAPI was used to stain the cell nuclei (central panel). Slides were washed with PBS and incubated with a fluorescein-conjugated secondary antibody at a 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [20G5] (ab171380)

Immunohistochemistry analysis of SOX2 showing staining in the nucleus of paraffin-treated mouse esophagus tissue (right) compared with a negative control without primary antibody (left).

To expose target proteins, antigen retrieval was performed using 10 mM sodium citrate (pH 6.0), microwaved for 8-15 minutes. Following antigen retrieval, tissues were blocked in 3% H_2O_2-methanol for 15 minutes at room temperature, washed with ddH_2O and PBS, and then probed with a SOX2 monoclonal antibody (ab171380) diluted by 3% BSA-PBS at a dilution of 1:20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Flow Cytometry - Anti-SOX2 antibody [20G5] (ab171380)

Flow cytometry analysis of HEL 11.4 induced IPS cells labeling SOX2 (blue histogram), using ab171380 at a 1/100 dilution, or a mouse IgG (green histogram) at a 1/100 dilution. A fluorescein-conjugated secondary antibody at a 1/200 dilution was used for the analysis.

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Product datasheet

Anti-Cardiac Troponin T antibody [1C11] ab8295

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概述

产品名称	Anti-Cardiac Troponin T抗体[1C11]
描述	**小鼠单克隆抗体**[1C11] to Cardiac Troponin T
宿主	Mouse
经测试应用	**适用于:** ICC/IF, IHC-P, Sandwich ELISA
种属反应性	**与反应:** Mouse, Rat, Dog, Human
免疫原	Other Immunogen Type corresponding to Human Cardiac Troponin T aa 171-190. Database link: **P45379**
阳性对照	Natural Human Cardiac Troponin T protein (**ab9937**) can be used as a positive control in WB. IHC: Human heart tissue. ICC/IF: ioSkeletal Myocytes - Human iPSC-Derived Skeletal Myocytes (**ab277612**).
常规说明	This antibody detects Troponin T in human cardiac muscle. No cross-reaction with skeletal troponin T, cTnI and TnC. This product was changed from ascites to tissue culture supernatant on 17th October 2017 and product received after this date will be from tissue culture supernatant. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
存储溶液	pH: 7.40 Preservative: 0.1% Sodium azide
纯度	Protein A purified
纯化说明	Purified from TCS

Primary antibody说明	This antibody detects Troponin T in human cardiac muscle. No cross-reaction with skeletal troponin T, cTnI and TnC.
克隆	单克隆
克隆编号	1C11
骨髓瘤	Sp2/0
同种型	IgG1
轻链类型	unknown

应用

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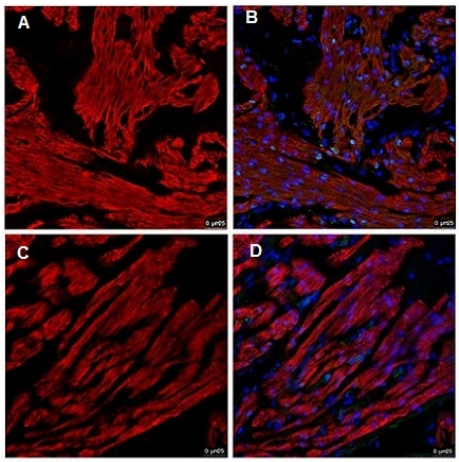
应用	Ab评论	说明
ICC/IF	★★★★☆ (6)	Use a concentration of 1 - 5 µg/ml.
IHC-P	★★★★★ (2)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Sandwich ELISA		Use at an assay dependent concentration. Can be used as Capture or Detection antibody.

靶标

功能	Troponin T is the tropomyosin-binding subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.
组织特异性	Heart. The fetal heart shows a greater expression in the atrium than in the ventricle, while the adult heart shows a greater expression in the ventricle than in the atrium. Isoform 6 predominates in normal adult heart. Isoforms 1, 7 and 8 are expressed in fetal heart. Isoform 7 is also expressed in failing adult heart.
疾病相关	Defects in TNNT2 are the cause of cardiomyopathy familial hypertrophic type 2 (CMH2) [MIM:115195]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death. Defects in TNNT2 are the cause of cardiomyopathy dilated type 1D (CMD1D) [MIM:601494]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death. Defects in TNNT2 are the cause of cardiomyopathy familial restrictive type 3 (RCM3) [MIM:612422]. Restrictive cardiomyopathy is a heart disorder characterized by impaired filling of the ventricles with reduced diastolic volume, in the presence of normal or near normal wall thickness and systolic function.
序列相似性	Belongs to the troponin T family.

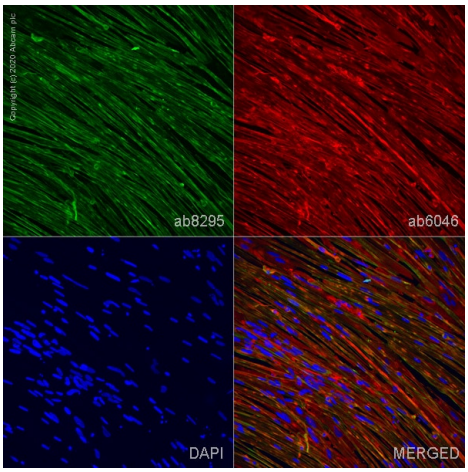
图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cardiac Troponin T antibody [1C11] (ab8295)

Ye L et al. Decreased Yes-Associated Protein-1 (YAP1) Expression in Pediatric Hearts with Ventricular Septal Defects. PLoS One 10:e0139712 (2015).

Paraffin-embedded Normal human Heart and iVSD heart tissue (were blocked using 10% FBS for 30 min) stained for Cardiac Troponin T (Red) using ab8295 at 1/200 dilution at room temperature for 2 hours. The slides were then incubated with Fluor® 555-conjugated anti-mouse (Abcam, **ab150107**; 1:1,000 dilution). The nuclear counterstain was DAPI (Blue).



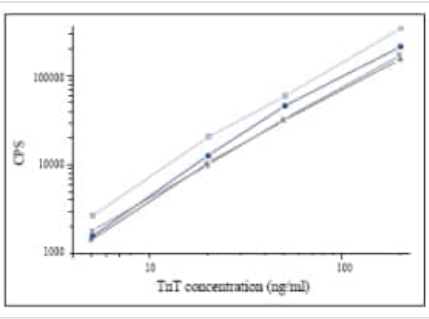
Immunocytochemistry/ Immunofluorescence - Anti-Cardiac Troponin T antibody [1C11] (ab8295)

Immunofluorescence staining of Cardiac Troponin T using ab8295 in ioSkeletal Myocytes - Human iPSC-Derived Skeletal Myocytes (**ab277612**), which were differentiated for 10 days post induction.

The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% PBS-Tween for 5 mins and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab8295 at 5 µg/mL and **ab6046**, rabbit polyclonal to beta Tubulin, at 1/1000 dilution. Cells were then incubated with **ab150117**, Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150088**, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

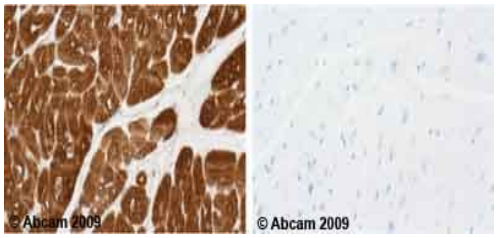
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown. Gamma is adjusted to 1.5 in all channels.

The antibody ab8295 gave comparable results using MeOH fixation (100%, 5 min).



Sandwich ELISA - Anti-Cardiac Troponin T antibody [1C11] (ab8295)

Calibration curves for sandwich cTnT fluoroimmunoassay with different animal TnTs as antigen.(dark blue) canine, (blue/grey) human, (grey) mouse, (black) rat. Monoclonal antibodies: capture, ab8295 [clone 1C11], 1 µg/well, detection **ab1454** [clone 7E7], 200 ng/well. Assay time, 30 min at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cardiac Troponin T antibody [1C11] (ab8295)

Ab8295 staining human normal heart. Staining is localised to the cytoplasm.
Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer citrate pH 6.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS), then incubated with primary antibody for 20 minutes, and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

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Revision 1

#6487 Store at -20C

α-Actinin (D6F6) XP® Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC	H M R Mk	Endogenous	100	Rabbit IgG	#P12814	87

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunofluorescence (Immunocytochemistry)	1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody*.

Specificity / Sensitivity

α-Actinin (D6F6) XP® Rabbit mAb recognizes endogenous levels of total α-actinin protein.

Species predicted to react based on 100% sequence homology:

Zebrafish

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Phe316 of human α-actinin-1 protein.

Background

α-Actinin belongs to the spectrin family of cytoskeletal proteins. It was first recognized as an actin cross-linking protein, forming an antiparallel homodimer with an actin binding head at the amino terminus of each monomer. The α-actinin protein interacts with a large number of proteins involved in signaling to the cytoskeleton, including those involved in cellular adhesion, migration, and immune cell targeting (1). The interaction of α-actinin with intercellular adhesion molecule-5 (ICAM-5) helps to promote neurite outgrowth (2). In osteoblasts, interaction of α-actinin with integrins stabilizes focal adhesions and may protect cells from apoptosis (3). The cytoskeletal α-actinin isoforms 1 and 4 (ACTN1, ACTN4) are non-muscle proteins that are present in stress fibers, sites of adhesion and intercellular contacts, filopodia, and lamellipodia. The muscle isoforms 2 and 3 (ACTN2, ACTN3) localize to the Z-discs of striated muscle and to dense bodies and plaques in smooth muscle (1).

Background References

1. Otey, C.A. and Carpen, O. (2004) *Cell Motil Cytoskeleton* 58, 104-11.
2. Nyman-Huttunen, H. et al. (2006) *J Cell Sci* 119, 3057-66.
3. Triplett, J.W. and Pavalko, F.M. (2006) *Am J Physiol Cell Physiol* 291, C909-21.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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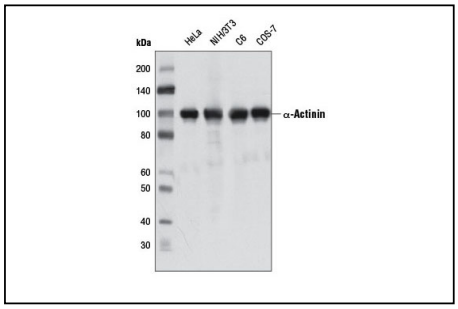
Revision 1

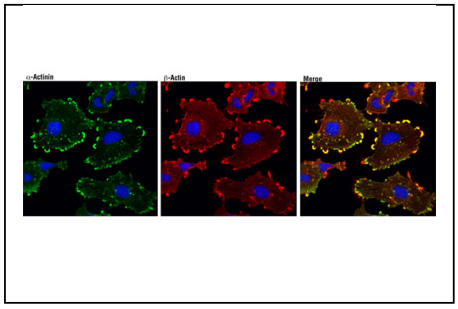
#6487

α-Actinin (D6F6) XP® Rabbit mAb

Western blot analysis of extracts from various cell lines using α-Actinin (D6F6) XP® Rabbit mAb.



Confocal immunofluorescent analysis of SNB19 cells using α-Actinin (D6F6) XP® Rabbit mAb (green) showing colocalization with actin filaments that were labeled with β-Actin (8H10D10) Mouse mAb #3700 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).



SANTA CRUZ BIOTECHNOLOGY, INC.

SERCA2 (IID8): sc-53010

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ATP dependent calcium pumps are responsible, in part, for the maintenance of low cytoplasmic free calcium concentrations. The ATP pumps that reside in intracellular organelles are encoded by a family of structurally related enzymes, termed the sarcoplasmic or endoplasmic reticulum calcium (SERCA) ATPases. The sarcoplasmic reticulum of striated muscle is a specialized intracellular membrane system that plays a critical role in the contraction and relaxation of muscle. The SERCAs mediate Ca^{2+} uptake into intracellular stores. SERCA-mediated Ca^{2+} uptake induces and maintains muscular relaxation. The SERCA1 gene is exclusively expressed in type II (fast) skeletal muscle. The SERCA2 gene is subject to tissue-dependent processing which is responsible for the generation of the SERCA2a muscle-specific form expressed in type I (slow) skeletal, cardiac and smooth muscle, and the SERCA2b isoform expressed in all cell types. The SERCA3 gene is not as well characterized and is found in non-muscle cells. SERCA2 plays an important part in regulating cardiac contractile function. SERCA3 is an isoform expressed in several cell types including platelets, lymphoid cells and mast cells. SERCA1, SERCA2 and SERCA3 all undergo alternative splicing.

REFERENCES

1. Aubier, M. and Viires, N. 1998. Calcium ATPase and respiratory muscle function. Eur. Respir. J. 11: 758-766.
2. Anger, M., et al. 1998. Cellular distribution of Ca^{2+} pumps and Ca^{2+} release channels in rat cardiac hypertrophy induced by aortic stenosis. Circulation 98: 2477-2486.

CHROMOSOMAL LOCATION

Genetic locus: ATP2A2 (human) mapping to 12q24.11; Atp2a2 (mouse) mapping to 5 F.

SOURCE

SERCA2 (IID8) is a mouse monoclonal antibody raised against purified cardiac sarcoplasmic reticulum of canine origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SERCA2 (IID8) is available conjugated to agarose (sc-53010 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-53010 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53010 PE), fluorescein (sc-53010 FITC), Alexa Fluor® 488 (sc-53010 AF488), Alexa Fluor® 546 (sc-53010 AF546), Alexa Fluor® 594 (sc-53010 AF594) or Alexa Fluor® 647 (sc-53010 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53010 AF680) or Alexa Fluor® 790 (sc-53010 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SERCA2 (IID8) is recommended for detection of SERCA2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

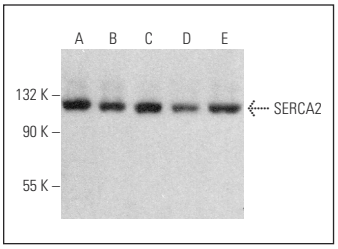
SERCA2 (IID8) is also recommended for detection of SERCA2 in additional species, including rabbit, bovine, canine and porcine.

Suitable for use as control antibody for SERCA2 siRNA (h): sc-36484, SERCA2 siRNA (m): sc-36485, SERCA2 shRNA Plasmid (h): sc-36484-SH, SERCA2 shRNA Plasmid (m): sc-36485-SH, SERCA2 shRNA (h) Lentiviral Particles: sc-36484-V and SERCA2 shRNA (m) Lentiviral Particles: sc-36485-V.

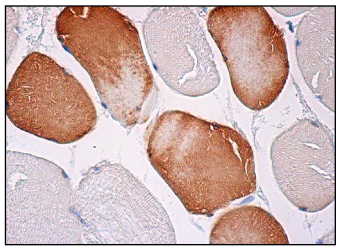
Molecular Weight of SERCA2: 100 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HT-1080 whole cell lysate: sc-364183 or CCRF-CEM cell lysate: sc-2225.

DATA



SERCA2 (IID8): sc-53010. Western blot analysis of SERCA2 expression in A-431 (**A**), HT-1080 (**B**), K-562 (**C**), CCRF-CEM (**D**) and Hep G2 (**E**) whole cell lysates.



SERCA2 (IID8): sc-53010. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of subset of myocytes.

SELECT PRODUCT CITATIONS

1. Kozieł, K., et al. 2009. Plasma membrane associated membranes (PAM) from Jurkat cells contain STIM1 protein is PAM involved in the capacitative calcium entry? Int. J. Biochem. Cell Biol. 41: 2440-2449.
2. Zizkova, P., et al. 2018. Dysfunction of SERCA pumps as novel mechanism of methylglyoxal cytotoxicity. Cell Calcium 74: 112-122.
3. Bovo, E., et al. 2019. Novel approach for quantification of endoplasmic reticulum Ca^{2+} transport. Am. J. Physiol. Heart Circ. Physiol. 316: H1323-H1331.
4. Byun, J.K., et al. 2020. Inhibition of glutamine utilization synergizes with immune checkpoint inhibitor to promote antitumor immunity. Mol. Cell 80: 592-606.e8.
5. Uchida, Y., et al. 2021. *Trans*-2-enoyl-CoA reductase limits Ca^{2+} accumulation in the endoplasmic reticulum by inhibiting the Ca^{2+} pump SERCA2b. J. Biol. Chem. 296: 100310.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Product datasheet

Anti-Ryanodine Receptor antibody [34C] ab2868

11 Abreviews 75 References 4 图像

概述

产品名称	Anti-Ryanodine Receptor抗体[34C]
描述	**小鼠单克隆抗体**[34C] to Ryanodine Receptor
宿主	Mouse
特异性	Detects Ryanodine Receptor (RyR)-1 and RyR-2 isoforms. In chickens, this antibody detects the alpha, beta and cardiac isoforms. This antibody also detects RyR-3 in mouse cells. In frog, this antibody detects the alpha and beta isoforms. In fish, this antibody detects the alpha isoform. By Western blot, this antibody detects a 565 kDa protein representing RyR from rat skeletal muscle extracts. In non-mammalian vertebrates, a doublet is seen at 565 kDa representing the alpha and beta isoforms of the receptor. Immunohistochemical staining of RyR in chicken brain results in intense staining of cerebellar Purkinje neurons.
经测试应用	**适用于:** IHC-P, ICC/IF, IHC-Fr, IP, Inhibition Assay, WB
种属反应性	**与反应:** Mouse, Rat, Sheep, Rabbit, Cow, Dog, Human, Pig, Xenopus laevis, Non human primates **预测可用于:** Fish, Amphibian
免疫原	Full length protein corresponding to Chicken Ryanodine Receptor. Partially purified chicken pectoral muscle ryanodine receptor.
阳性对照	rat skeletal muscle
常规说明	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40

	Preservative: 0.05% Sodium azide Constituent: PBS
纯度	Protein A purified
Primary antibody说明	The Ryanodine Receptor (RyR) is the channel responsible for calcium release from muscle cell Sarcoplasmic Reticulum (SR) and also plays a role in calcium regulation in non-muscle cells. The RyR exists as a homotetramer and is predicted to have a short cytoplasmic C-terminus and 4-10 transmembrane domains. The remainder of the protein, termed the "foot" region, is located in the cytoplasm between the transverse tubule and the SR. Mammalian RyR isoforms are the product of three different genes: RyR-1 is expressed predominantly in skeletal muscle and areas of the brain; RyR-2 is expressed predominantly in heart muscle but also found in the stomach, endothelial cells and diffuse areas of the brain; and RyR-3 is found in smooth muscle and the brain (striatum, thalamus and hippocampus). In non-mammalian vertebrates, the RyR isoforms are termed alpha, beta and cardiac which correlate loosely to the mammalian RyR-1, RyR-3 and RyR-2 isoforms respectively.
克隆	单克隆
克隆编号	34C
同种型	IgG1

应用

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"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

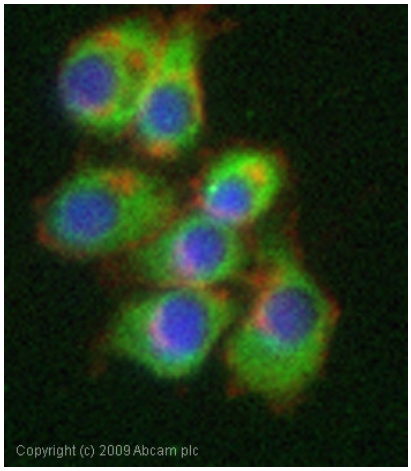
应用	Ab评论	说明
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration.
ICC/IF	★★★★☆ (6)	Use a concentration of 1 µg/ml.
IHC-Fr	★★★★☆ (2)	Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
Inhibition Assay		Use at an assay dependent concentration.
WB	★★★★☆ (2)	Use at an assay dependent concentration. Predicted molecular weight: 565 kDa. As RyR is a large protein, we recommend using a 6-8% gel, wet transfering protein overnight at low voltage, adding 0.1% SDS to transfer buffer and reducing methanol to 10% or less.

靶标

功能	Calcium channel that mediates the release of Ca(2+) from the sarcoplasmic reticulum into the cytoplasm and thereby plays a key role in triggering muscle contraction following depolarization of T-tubules. Repeated very high-level exercise increases the open probability of the channel and leads to Ca(2+) leaking into the cytoplasm. Can also mediate the release of Ca(2+) from intracellular stores in neurons, and may thereby promote prolonged Ca(2+) signaling in the brain.

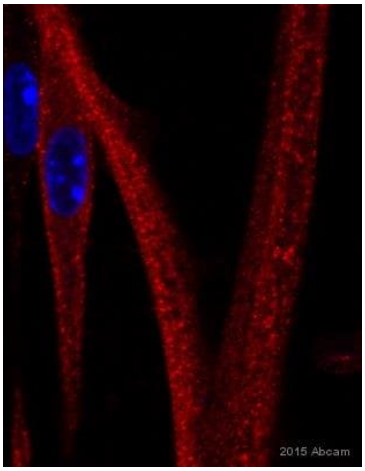
	Required for normal embryonic development of muscle fibers and skeletal muscle. Required for normal heart morphogenesis, skin development and ossification during embryogenesis.
组织特异性	Skeletal muscle and brain (cerebellum and hippocampus).
疾病相关	Malignant hyperthermia 1 Central core disease of muscle Multiminicore disease with external ophthalmoplegia Myopathy, congenital, with fiber-type disproportion Defects in RYR1 may be a cause of Samaritan myopathy, a congenital myopathy with benign course. Patients display severe hypotonia and respiratory distress at birth. Unlike other congenital myopathies, the health status constantly improves and patients are minimally affected at adulthood.
序列相似性	Belongs to the ryanodine receptor (TC 1.A.3.1) family. RYR1 subfamily. Contains 3 B30.2/SPRY domains. Contains 5 MIR domains.
结构域	The calcium release channel activity resides in the C-terminal region while the remaining part of the protein constitutes the 'foot' structure spanning the junctional gap between the sarcoplasmic reticulum (SR) and the T-tubule.
翻译后修饰	Channel activity is modulated by phosphorylation. Phosphorylation at Ser-2843 may increase channel activity. Repeated very high-level exercise increases phosphorylation at Ser-2843. Activated by reversible S-nitrosylation. Repeated very high-level exercise increases S-nitrosylation.
细胞定位	Sarcoplasmic reticulum membrane. Membrane. The number of predicted transmembrane domains varies between orthologs, but both N-terminus and C-terminus seem to be cytoplasmic.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Ryanodine Receptor antibody [34C] (ab2868)

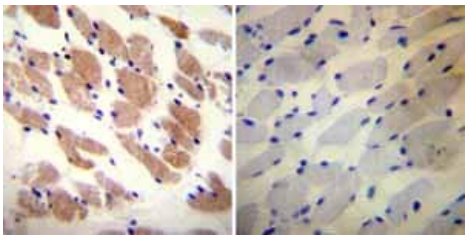
ICC/IF image of ab2868 stained PC12 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab2868, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunocytochemistry/ Immunofluorescence - Anti-Ryanodine Receptor antibody [34C] (ab2868)

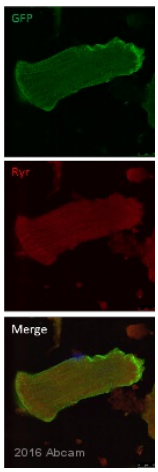
Image courtesy of an Abreview submitted by Jenny Sharpe

ab2868 staining Ryanodine Receptor (red) in Mouse Skeletal muscle cells at day 10 of agrin-treated differentation by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.25% Triton X-100 in PBS and blocked with 10% serum for 45 minutes at 20°C. Samples were incubated with primary antibody (1/200 in PBS + 3% BSA) for 2 hours at 20°C. An Alexa Fluor® 647-conjugated Donkey anti-mouse IgG polyclonal (1/500) was used as the secondary antibody. Nucleus stained blue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ryanodine Receptor antibody [34C] (ab2868)

Immunohistochemistry was performed on biopsies of deparaffinized Human skeletal muscle tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:20 with a mouse monoclonal antibody recognizing Ryanodine Receptor ab2868 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunocytochemistry/ Immunofluorescence - Anti-Ryanodine Receptor antibody [34C] (ab2868)

Image courtesy of an Abreview submitted by Can Zhou

ab2868 staining Ryanodine Receptor in Rat cardiomyocyte cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with methanol/acetone (1:1) and blocked with 3% BSA for 1 hour at 18°C. Samples were incubated with primary antibody (1/300 in PBS + 3% BSA) for 16 hours at 4°C. An Alexa Fluor® 546-conjugated Goat anti-mouse IgG (H+L) polyclonal (1/300) was used as the secondary antibody.

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NCX1 Polyclonal antibody

Catalog Number:55075-1-AP 8 Publications

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Basic Information

Catalog Number:
55075-1-AP

Size:
500 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_021097

GeneID (NCBI):
6546

Full Name:
solute carrier family 8 (sodium/calcium exchanger), member 1

Calculated MW:
109 kDa

Observed MW:
120 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB

Applications

Tested Applications:
IP, WB, ELISA

Cited Applications:
CoIP, IHC, IP, WB

Species Specificity:
human, rat, mouse

Cited Species:
chicken, mouse, rat

Positive Controls:

WB : mouse brain tissue, rat brain tissue

IP : mouse brain tissue,

Background Information

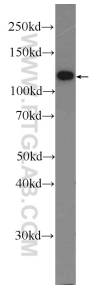
Notable Publications

Author	Pubmed ID	Journal	Application
Qinfeng Hu	35315077	Alcohol Clin Exp Res	WB
Siwen Li	28728119	Chemosphere	WB
Jiumei Cai	35845941	Biomed Res Int	WB

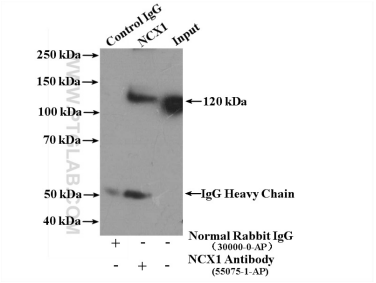
Storage

Storage:
Store at -20°C.
Storage Buffer:
0.1M NaHCO3, 0.1M glycine, 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



mouse brain tissue were subjected to SDS PAGE followed by western blot with 55075-1-AP (NCX1 antibody at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP Result of anti-NCX1 (IP:55075-1-AP, 4ug; Detection:55075-1-AP 1:1000) with mouse brain tissue lysate 4000ug.

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L-VOCC Polyclonal antibody

Catalog Number:21774-1-AP 18 Publications

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Basic Information

Catalog Number:
21774-1-AP

Size:
350 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG16455

GenBank Accession Number:
BC146846

GeneID (NCBI):
775

Full Name:
calcium channel, voltage-dependent, L type, alpha 1C subunit

Calculated MW:
2135 aa, 239 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
IHC 1:200-1:800
IF 1:50-1:500

Applications

Tested Applications:
IF, IHC,ELISA

Cited Applications:
IF, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rabbit, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

IHC : mouse brain tissue, rat brain tissue, mouse liver tissue

IF : mouse brain tissue,

Background Information

Notable Publications

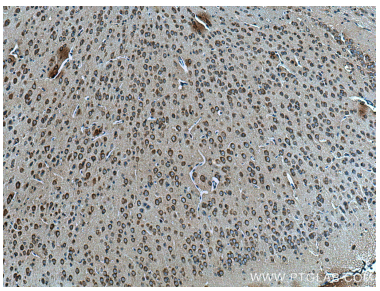
Author	Pubmed ID	Journal	Application
Zhangchi Liu	36332480	Biochem Biophys Res Commun	WB
Chao Gao	34667723	Int J Ophthalmol	WB
Yaxiong Yang	35589958	Commun Biol	WB

Storage

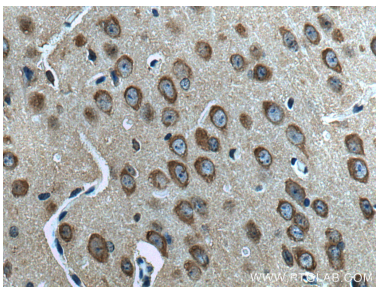
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

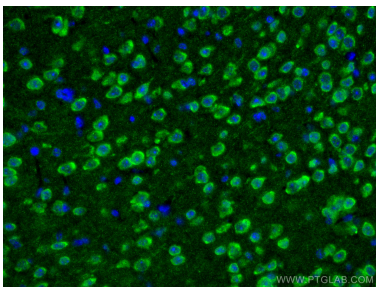
Selected Validation Data



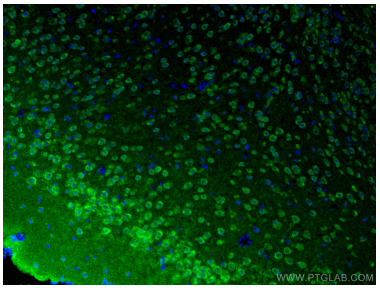
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21774-1-AP (L-VOCC antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21774-1-AP (L-VOCC antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using L-VOCC antibody (21774-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using L-VOCC antibody (21774-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

#14562 Store at -20C

Phospholamban (D9W8M) Rabbit mAb

Cell Signaling TECHNOLOGY®

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Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	12, 24	Rabbit IgG	#P26678	5350

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Phospholamban (D9W8M) Rabbit mAb recognizes endogenous levels of total phospholamban protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human phospholamban protein.

Background

Phospholamban (PLN) was identified as a major phosphoprotein component of the sarcoplasmic reticulum (SR) (1). Its name, "lamban", is derived from the greek word "lambano" meaning "to receive", so named due to the fact that phospholamban is heavily phosphorylated on serine and threonine residues in response to cardiac stimulation (1). Although originally thought to be a single 20-25 kDa protein due to its electrophoretic mobility on SDS-PAGE, PLN is actually a 52 amino acid, 6 kDa, membrane-spanning protein capable of forming stable homooligomers, even in the presence of SDS (2). Despite very high expression in cardiac tissue, phospholamban is also expressed in skeletal and smooth muscle (3). Localization of PLN is limited to the SR, where it serves as a regulator of the sarco-endoplasmic reticulum calcium ATPase, SERCA (4). PLN binds directly to SERCA and effectively lowers its affinity for calcium, thus reducing calcium transport into the SR. Phosphorylation of PLN at Ser16 by Protein Kinase A or myotonic dystrophy protein kinase and/or phosphorylation at Thr17 by Ca^{2+}/calmodulin-dependent protein kinase results in release of PLN from SERCA, relief of this inhibition, and increased calcium uptake by the SR (reviewed in 5,6). It has long been held that phosphorylation at Ser16 and Thr17 occurs sequentially, but increasing evidence suggests that phosphorylation, especially at Thr17, may be differentially regulated (reviewed in 7,8).

Rodent models of heart failure have shown that the expression level and degree of phosphorylation of PLN are critical in modulating calcium flux and contractility (reviewed in 9-11). Deletion or decreased expression of PLN promotes increased calcium flux and increased cardiac contractility, whereas overexpression of PLN results in sequestration of SERCA, decreased calcium flux, reduced contractility, and rescue of cardiac dysfunction and failure in mouse models of hypertension and cardiomyopathy (reviewed in 10). Distinct mutations in PLN have been detected in humans, resulting either in decreased or no expression of PLN protein (12,13) or binding defects between PLN, SERCA and/or regulatory proteins (14,15), both of which result in cardiac myopathy and heart failure. Interestingly, while the human phenotype of most PLN defects mimic those seen in rodent and vice versa, there are some instances where the type and severity of cardiac disease resulting from PLN mutations in rodent and human differ, making a consensus mechanism elusive.

Background References

1. Kirchberber, M.A. et al. (1975) *Recent Adv Stud Cardiac Struct Metab* 5, 103-15.
2. Zhan, Q.Q. et al. (1991) *J Biol Chem* 266, 21810-4.
3. Fujii, J. et al. (1991) *J Biol Chem* 266, 11669-75.
4. Tada, M. and Kirchberger, M.A. *Recent Adv Stud Cardiac Struct Metab* 11, 265-72.
5. Traaseth, N.J. et al. (2008) *Biochemistry* 47, 3-13.
6. Bhupathy, P. et al. (2007) *J Mol Cell Cardiol* 42, 903-11.
7. Hagemann, D. and Xiao, R.P. (2002) *Trends Cardiovasc Med* 12, 51-6.
8. Mattiazzi, A. et al. (2005) *Cardiovasc Res* 68, 366-75.
9. Chu, G. and Kranias, E.G. (2006) *Novartis Found Symp* 274, 156-71; discussion 172-5, 272-6.
10. Schwinger, R.H. and Frank, K.F. (2003) *Sci STKE* 2003, pe15.
11. MacLennan, D.H. and Kranias, E.G. (2003) *Nat Rev Mol Cell Biol* 4, 566-77.
12. Haghighi, K. et al. (2008) *Hum Mutat* 29, 640-7.
13. Haghighi, K. et al. (2003) *J Clin Invest* 111, 869-76.
14. Schmitt, J.P. et al. (2003) *Science* 299, 1410-3.
15. Haghighi, K. et al. (2006) *Proc Natl Acad Sci USA* 103, 1388-93.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

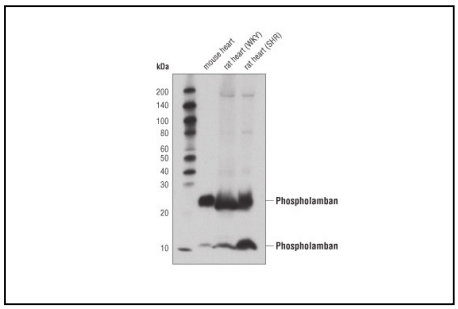
限制使用

Revision 1

#14562

Phospholamban (D9W8M) Rabbit mAb

Western blot analysis of extracts from mouse heart and 16-month old control (WKY) and spontaneous hypertensive (SHR) rat hearts using Phospholamban (D9W8M) Rabbit mAb.



#8496 Store at -20C

Phospho-Phospholamban (Ser16/Thr17) Antibody

Cell Signaling TECHNOLOGY®

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Support: 877-678-TECH (8324)

Web: info@cellsignal.com cellsignal.com

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	R	Endogenous	6 (monomer); 12, 24 (oligomers)	Rabbit	#P26678	5350

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Phospho-Phospholamban (Ser16/Thr17) Antibody recognizes endogenous levels of phospholamban protein only when phosphorylated at Ser16 and Thr17. This antibody does not detect mono- or non-phosphorylated phospholamban.

Species predicted to react based on 100% sequence homology:

Human, Mouse, Bovine, Dog, Pig

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser16/Thr17 of human phospholamban protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Phospholamban (PLN) was identified as a major phosphoprotein component of the sarcoplasmic reticulum (SR) (1). Its name, "lamban", is derived from the greek word "lambano" meaning "to receive", so named due to the fact that phospholamban is heavily phosphorylated on serine and threonine residues in response to cardiac stimulation (1). Although originally thought to be a single 20-25 kDa protein due to its electrophoretic mobility on SDS-PAGE, PLN is actually a 52 amino acid, 6 kDa, membrane-spanning protein capable of forming stable homooligomers, even in the presence of SDS (2). Despite very high expression in cardiac tissue, phospholamban is also expressed in skeletal and smooth muscle (3). Localization of PLN is limited to the SR, where it serves as a regulator of the sarco-endoplasmic reticulum calcium ATPase, SERCA (4). PLN binds directly to SERCA and effectively lowers its affinity for calcium, thus reducing calcium transport into the SR. Phosphorylation of PLN at Ser16 by Protein Kinase A or myotonic dystrophy protein kinase and/or phosphorylation at Thr17 by Ca^{2+}/calmodulin-dependent protein kinase results in release of PLN from SERCA, relief of this inhibition, and increased calcium uptake by the SR (reviewed in 5,6). It has long been held that phosphorylation at Ser16 and Thr17 occurs sequentially, but increasing evidence suggests that phosphorylation, especially at Thr17, may be differentially regulated (reviewed in 7,8).

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Ce: C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

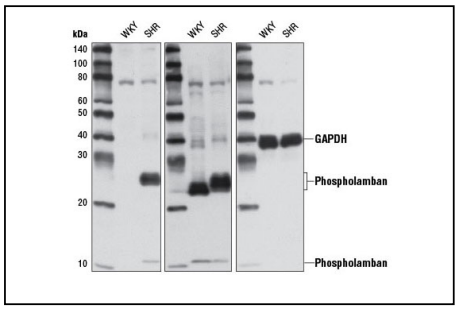
限制使用

Revision 1

#8496

Phospho-Phospholamban (Ser16/Thr17) Antibody

Western blot analysis of extracts from 16-month old control (WKY) and spontaneous hypertensive (SHR) rat hearts using Phospho-Phospholamban (Ser16/Thr17) Antibody (left), Phospholamban Antibody #8495 (middle), or GAPDH (14C10) Rabbit mAb #2118 (right).



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SAFETY DATA SHEET

Section 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifiers

Product Name: Anti-$Na_V1.5$ (SCN5A) (493-511) Antibody
Catalogue Number: ASC-005
Synonyms: Sodium channel protein type 5 subunit alpha

1.2 Relevant identified uses of the substance or mixture and uses advised against

For research purposes only. Not for human or veterinary use.

1.3 Details of the supplier of the safety data sheet

Company:	Alomone Labs Jerusalem BioPark (JBP) PO Box 4287 Jerusalem 9104201 Israel	Telephone: Fax: Internet: E-mail:	+972-2-587-2202 +972-2-587-1101 www.alomone.com info@alomone.com

1.4 Emergency telephone number

Telephone: +972-2-587-2202 (Sun-Thu 08.00-18.00 IST)

Section 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards

None.

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name: Sodium azide
CAS Number: 26628-22-8
EC Number: 247-852-1
Weight percentage: 0.05%
Classification: At this concentration, ingredients are not hazardous.

Section 4. FIRST AID MEASURES

4.1 Description of first aid measures

In all cases of exposure, obtain medical advice.
Inhalation: Move to fresh air and monitor breathing. If breathing becomes difficult give oxygen. If breathing stops give artificial respiration. Obtain medical attention.
Skin Contact: Wash off immediately with plenty of water while removing all contaminated clothing. Wash before reuse.
Eye Contact: Hold eyelids apart and flush eyes with plenty of water.
Ingestion: Rinse mouth with plenty of water. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to the professional medical staff. Immediate medical attention is required.

Section 5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of toxic and corrosive gases/vapors.

5.3 Precautions for fire-fighters

Wear self-contained breathing apparatus for firefighting and protective clothing to prevent contact with skin and eyes.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Containment and clean-up methods and materials

Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat. Keep away from source of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid the formation and inhalation of dust/fumes. If ingested, seek medical advice immediately and show the container or the label.

7.2 Conditions for safe storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep away from direct sunlight. This product ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure guidelines

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Ensure adequate ventilation, especially in confined areas. Use in a fume hood where applicable. Ensure laboratory is equipped with a safety shower and eye wash station. General industrial hygiene practice.

Jerusalem BioPark (JBP), Hadassah Ein Kerem, P.O.BOX 4287 Jerusalem 91042, Israel
Tel: +972-2-5872202, Fax: +972-2-5871101, +972-2-6426975
Email: info@alomone.com, www.alomone.com

Personal protective equipment

Eye/face: Safety goggles.
Skin: Chemical resistant gloves. Gloves should be inspected before use. Wash and dry hands thoroughly after handling.
Body: Wear appropriate protective clothing. Remove and wash contaminated clothing before re-use.
Respiratory protection: Use a suitable respirator as conditions warrant.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties

Physical state: White powder.
Odor: Not available.
Odor threshold: Not available.
pH: Not available.
Boiling point/range: Not available.
Flash point: Not available.
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Upper/lower flammability or explosive limits: Not available.
Melting/freezing point: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative Density: Not available.
Explosive properties: Not available.
Flash point: Not available.
Viscosity: Not available.
Solubility: Not available.
Partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Explosive properties: Not available.
Oxidizing properties: Not available.

9.2 Other information

No data available.

Section 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong oxidizing agents, strong acids/bases.

10.6 Hazardous combustion or decomposition products

May emit toxic gases upon thermal decomposition.

Section 11. TOXICOLOGICAL INFORMATION

11.1 Toxicological effects

Acute toxicity
Does not present acute toxicity hazard based on supplied information.
Skin corrosion/irritation
No information available.
Eye damage/irritation
No information available.

Respiratory/skin sensitization
No information available.
Mutagenicity
No information available.
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
No information available.
Aspiration/inhalation exposure
No information available.
Routes of exposure/symptoms
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Ingestion: There may be irritation of the throat.
Skin: There may be mild irritation at the site of contact.
Eyes: There may be irritation and redness.

Section 12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio-accumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

Section 13. DISPOSAL CONSIDERATIONS

13.1 Waste methods

Product
Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with federal, state and local environmental control regulations.
Contaminated packaging
Dispose in a regulated landfill site or other method for hazardous or toxic waste in accordance with federal, state and local environmental control regulations.

Section 14. TRANSPORT INFORMATION

ADR: Not dangerous goods.
IATA: Not dangerous goods.
DOT: Not dangerous goods.
TGD: Not dangerous goods.
IMDG/IMO: Not dangerous goods.

Section 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture

OSHA Hazards: No known OSHA hazards
SARA 302 Components: The following components are subject to reporting levels established by SARA Title III, Section 302: Sodium azide CAS-No. 26628-22-8
SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: No SARA Hazards
Massachusetts Right to Know Components: Sodium azide CAS-No. 26628-22-8.
Pennsylvania Right to Know Components: Water CAS-No. 7732-18-5. Disodium hydrogenorthophosphate 7558-79-4. Sodium azide 26628-22-8.
New Jersey Right to Know Components: Water CAS-No. 7732-18-5.
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Section 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow local and national safety legislation. The absence of warning may not, under any circumstances, be taken to mean that no hazard exists. Alomone Labs disclaims all liability for any damage resulting from use of this material.

Last modified: June 15, 2023

Document creation date: June 17, 2023

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Email: info@alomone.com, www.alomone.com

#M20006

GAPDH(3B3) Mouse mAb

Orders ■ 400-6123-828
orders@ab-mart.com
Web ■ www.ab-mart.com.cn

☐ 50 µl (25 Western mini-blots)
☐ 100 µl (50 Western mini-blots)
☐ 200 µl (100 Western mini-blots)

BACKGROUNDBACKGROUND

Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) catalyzes the phosphorylation of glyceraldehyde-3-phosphate during glycolysis. Though differentially expressed from tissue to tissue, GAPDH is thought to be a constitutively expressed housekeeping protein. For this reason, GAPDH mRNA and protein levels are often measured as controls in experiments quantifying specific changes in expression of other targets. Recent work has elucidated roles for GAPDH in apoptosis, gene expression and nuclear transport. GAPDH may also play a role in neurodegenerative pathologies such as Huntington and Alzheimer's diseases.

REFERENCES

1. Barber, R.D. et al. 2005. GAPDH as a housekeeping gene: analysis of GAPDH mRNA expression in a panel of 72 human tissues. Physiol. Genomics 21, 389-95. 2. Hara, M.R. and Snyder, S.H. 2006. Nitric oxide-GAPDH-Siah: a novel cell death cascade. Cell Mol. Neurobiol. 26, 527-38.
3. Zheng, L. et al. 2003. S phase activation of the histone H2B promoter by OCA-S, a coactivator complex that contains GAPDH as a key component. Cell 114, 255-66.
4. Bae, B.I. et al. 2006. Mutant huntingtin: nuclear translocation and cytotoxicity mediated by GAPDH. Proc. Natl. Acad. Sci. USA 103, 3405-9.
5. Wang, Q. et al. 2005. Proteomic analysis of neurofibrillary tangles in Alzheimer disease identifies GAPDH as a detergent-insoluble paired helical filament tau binding protein. FASEB J. 19, 869-71.

SOURCE

This Abmart monoclonal antibody is produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to the carboxy terminus of human GAPDH.

SPECIFICITY

GAPDH (3B3) Mouse mAb detects endogenous levels of total GAPDH protein.

STORAGE

Store at -20°C. Stable for one year from the date of shipment.

REACTIVITY

Human

ISOTYPE

Mouse IgG1

IMPORTANT

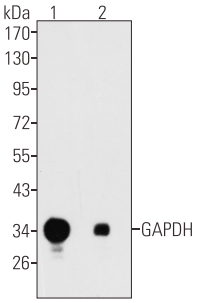
Use an **anti-MOUSE** secondary antibody to detect the 3B3 antibody.

RECOMMENDED ANTIBODY DILUTIONS

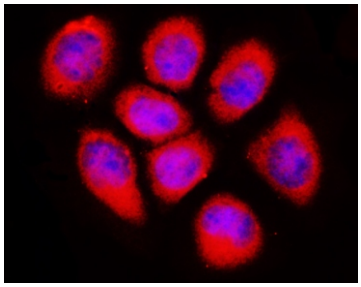
Western blotting	1:5000
Immunofluorescence	1:500

*** For Western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1× TBS, 0.05% Tween-20 at 4°C with gentle shaking, overnight.**

APPLICATION DATA



Western blot analysis of HeLa cell lysate, using Abmart GAPDH (3B3) Mouse mAb. The antibody dilutions are 1:5000 (lane 1) and 1:10000 (lane 2). Each lane was loaded with 10 µg of cell lysate.



IF analysis of HeLa cells, using Abmart GAPDH (3B3) Mouse mAb at a 1:500 dilution.

COMPANION PRODUCTS

#M20005 beta-Tubulin (10B1) Mouse mAb

abcam

Product datasheet

Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] ab7671

42 Abreviews 331 References 6 图像

概述

产品名称	Anti-alpha 1 Sodium Potassium ATPase抗体[464.6]
描述	**小鼠单克隆抗体**[464.6] to alpha 1 Sodium Potassium ATPase
宿主	Mouse
经测试应用	**适用于:** ICC/IF, IHC-P, WB
种属反应性	**与反应:** Mouse, Rat, Rabbit, Human, Pig **预测可用于:** Sheep, Dog, Xenopus laevis, Monkey
免疫原	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
阳性对照	This antibody gave a positive signal in the following tissue lysates: human kidney, rabbit heart, human brain and human brain membrane.This antibody also gave a positive signal in Porcine proximal tubule lysate.
常规说明	This antibody clone [464.6] is manufactured by Abcam. If you require this antibody in a different buffer formulation or a different conjugate for your experiments, please contact **orders@abcam.com** or you can find further information **here**. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine Some batches contain 6.97% L-Arginine as a stabilizing agent. For lot-specific buffer information,

	please contact our Scientific Support team.
纯度	Protein G purified
克隆	单克隆
克隆编号	464.6
同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee Abpromise™承诺保证使用ab7671于以下的经测试应用

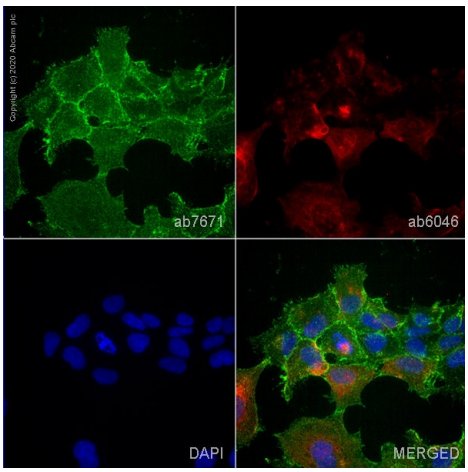
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	★★★★☆ (11)	Use a concentration of 1 - 10 µg/ml. We recommend Methanol fixation and **Goat Anti-Mouse IgG H&L (Alexa Fluor® 555) preadsorbed (ab150118) secondary antibody**.
IHC-P	★★★★★ (5)	Use a concentration of 5 µg/ml.
WB	★★★★☆ (23)	Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 112 kDa. Abcam recommends using 5% BSA as the blocking agent.

靶标

功能	This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients.
序列相似性	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIC subfamily.
翻译后修饰	Phosphorylation on Tyr-10 modulates pumping activity.
细胞定位	Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

图片

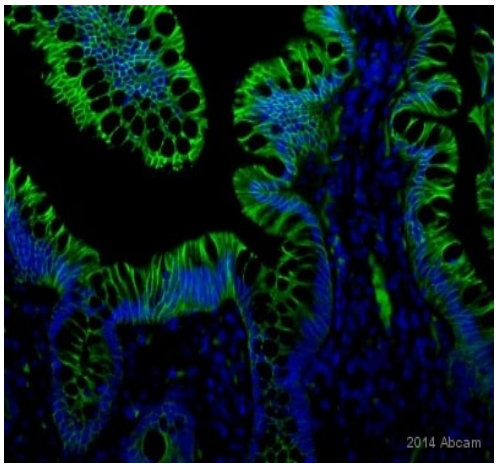


Immunocytochemistry/ Immunofluorescence - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671)

ab7671 staining alpha 1 Sodium Potassium ATPase in Hek293 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab7671 at 1µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 100% methanol (5 min).

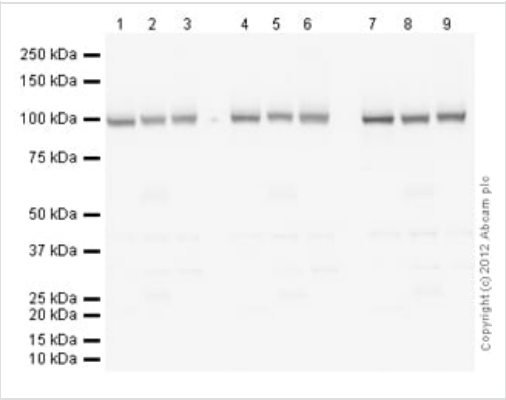
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a single confocal section is shown.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671)

This image is courtesy of an Abreview submitted by Anne Sailer

ab7671 staining alpha 1 Sodium Potassium ATPase in human formaldehyde tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 5% BSA for 12 hours at 4°C; antigen retrieval was by heat mediation in a buffer pH 9. Samples were incubated with primary antibody (5µg/ml in 5% BSA) for 16 hours at 4°C. An Alexa Fluor® 488-conjugated donkey anti-mouse IgG polyclonal (1/1000) was used as the secondary antibody.



Western blot - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671)

Lanes 1-3 : Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 1 µg/ml
Lanes 4-6 : Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 2 µg/ml
Lanes 7-9 : Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 5 µg/ml

Lanes 1 & 4 & 7 : Human brain tissue lysate - total protein (**ab29466**)
Lanes 2 & 5 & 8 : Brain (Mouse) Tissue Lysate (**ab27253**)
Lanes 3 & 6 & 9 : Brain (Rat) Tissue Lysate (**ab7942**)

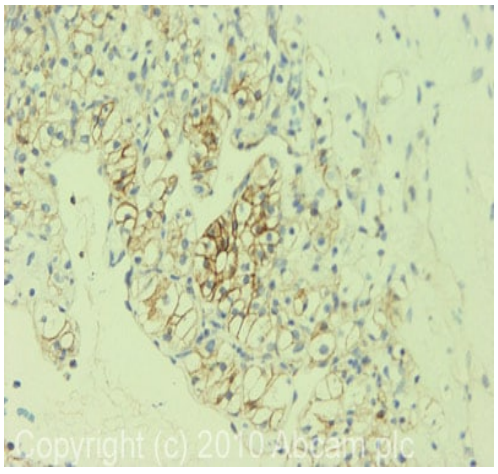
Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 112 kDa

Exposure time: 3 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671)

IHC image of Ab7671 staining in Human Kidney Carcinoma 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 Ab7671, 5µg/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.

Western blot - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671)

All lanes : alpha 1 Sodium Potassium ATPase antibody [464.6] - Plasma Membrane Marker at 10 µg/ml

Lane 1 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate
Lane 2 : Human kidney tissue lysate - total protein (**ab30203**)
Lane 3 : Heart (Rabbit) Whole Cell Lysate - normal tissue (**ab29072**)
Lane 4 : Human brain tissue lysate - total protein (**ab29466**)
Lane 5 : Brain (Human) Membrane Lysate - adult normal tissue

Lysates/proteins at 20 µg per lane.

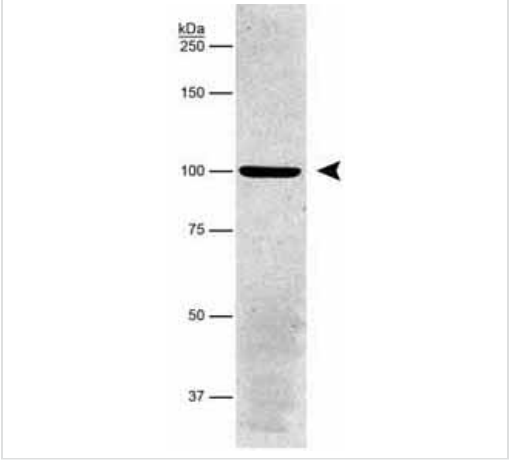
Secondary
All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 112 kDa
Observed band size: 100 kDa

Exposure time: 3 minutes



Western blot - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671)

Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 1/5000 dilution + Porcine proximal tubule lysate

Predicted band size: 112 kDa

Western blot analysis detecting Na, K-ATP-ase (alpha) in porcine proximal tubule protein, using Ab7671. Band is at 112 kDa.

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SANTA CRUZ BIOTECHNOLOGY, INC.

Nanog (H-155): sc-33759

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Nanog (from "Tir Na Nog", the mythologic Celtic land of the ever young) is a divergent homeodomain protein that directs pluripotency and differentiation of undifferentiated embryonic stem cells. Nanog mRNA is present in pluripotent mouse and human cell lines and absent from differentiated cells. Human Nanog protein shares 52% overall amino acid identity with the mouse protein and 85% identity in the homeodomain. Human Nanog maps to gene locus 12p13.31, whereas mouse Nanog maps to gene loci 6 F2. Murine embryonic Nanog expression is detected in the inner cell mass of the blastocyst. High levels of human Nanog expression have been detected by Northern analysis in the undifferentiated NTERA-2 cl.D1 embryonal carcinoma cell line.

CHROMOSOMAL LOCATION

Genetic locus: NANOG (human) mapping to 12p13.31.

SOURCE

Nanog (H-155) is a rabbit polyclonal antibody raised against amino acids 151-305 mapping at the C-terminus of Nanog of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Nanog (H-155) is recommended for detection of Nanog of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); also recommended for detection of NanogP1 and NanogP8.

Suitable for use as control antibody for Nanog siRNA (h): sc-43958, Nanog shRNA Plasmid (h): sc-43958-SH and Nanog shRNA (h) Lentiviral Particles: sc-43958-V.

Molecular Weight of Nanog: 40 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

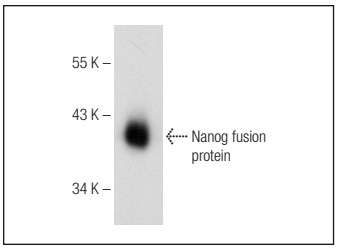
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Nanog (H-155): sc-33759. Western blot analysis of human recombinant Nanog fusion protein.

SELECT PRODUCT CITATIONS

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