

Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free ab239839

Recombinant RabMAb

9 Images

Overview

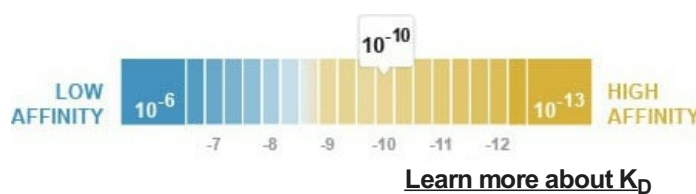
Product name	Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free
Description	Rabbit monoclonal [EPR1792Y] to pan Cadherin - BSA and Azide free
Host species	Rabbit
Specificity	The immunogen used for this product shares 100% homology with N-cadherin, 100% homology with R-cadherin, 93% homology to K-cadherin, 93% homology to P-cadherin, 93% homology to E-cadherin, and 73% homology to VE-cadherin. Cross-reactivities with these proteins have not been confirmed experimentally.
Tested applications	Suitable for: Flow Cyt (Intra), IP, ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: C6 whole cell lysate. Mouse heart tissue lysate. Human, mouse, and rat brain tissue lysates; ICC: MCF7 cells; IHC-P: Human and rat colon and mouse testis tissue; IP: Rat heart lysate; Flow Cyt (intra): HeLa cells.
General notes	<p>ab239839 is the carrier-free version of ab51034.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity

- Long-term security of supply
 - Animal-free production
- For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	K _D = 6.10 x 10 ⁻¹⁰ M



Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1792Y
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab239839 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

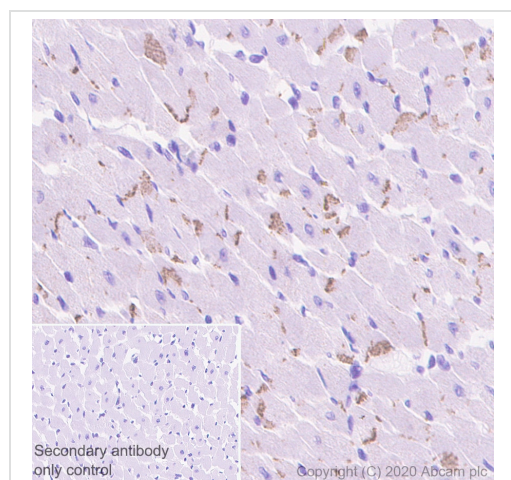
Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 140 kDa (predicted molecular weight: 100 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .

Target

Relevance

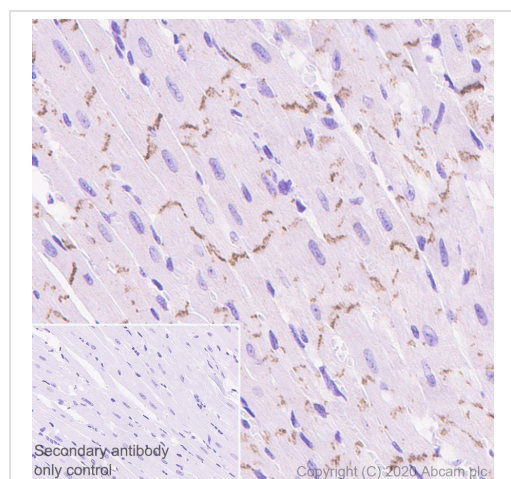
Cadherins are members of a multigene family of single chain glycoprotein receptors mediating calcium dependent cell-cell adhesion. They play an important role in the growth and development of cells via the mechanisms of control of tissue architecture and the maintenance of tissue integrity. Cadherins are expressed in a tissue specific manner and are required for assembly of cells into solid tissue. Individual cadherin molecules are known to co-operate with each other to form a linear cell adhesion zipper. In adhesion junctions cadherins are bound to beta and gamma catenins which in turn bind to alpha catenin, an actin binding protein. Cadherins play an important part in tumor invasion and metastasis.

Images



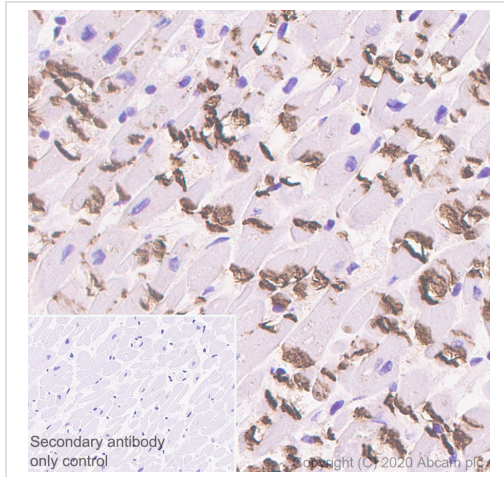
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cardiac muscle tissue sections labeling pan Cadherin with purified [ab51034](#) at 1/500 dilution (0.26 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51034](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)

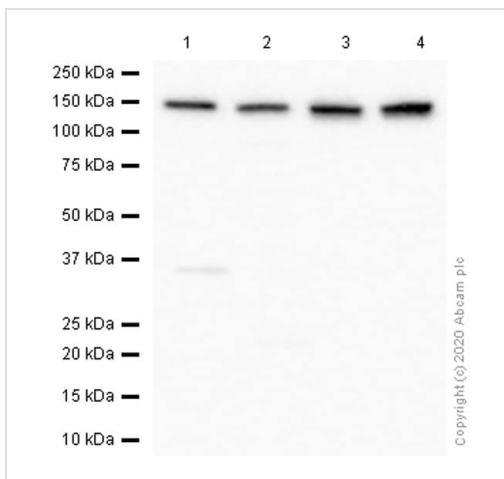
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cardiac muscle tissue sections labeling pan Cadherin with purified [ab51034](#) at 1/500 dilution (0.26 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51034](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cardiac muscle tissue sections labeling pan Cadherin with purified **ab51034** at 1/500 dilution (0.26 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51034**).



Western blot - Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)

All lanes : Anti-pan Cadherin antibody [EPR1792Y] - Intercellular Junction Marker (**ab51034**) at 1/50000 dilution (purified)

Lane 1 : C6 (Rat glial tumor glial cell) whole cell lysate

Lane 2 : Human brain lysate

Lane 3 : Mouse brain lysate

Lane 4 : Rat brain lysate

Lysates/proteins at 20 µg per lane.

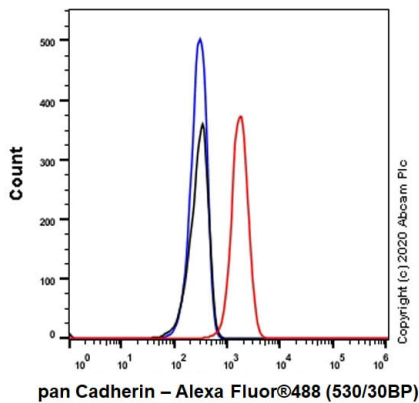
Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 100 kDa

Observed band size: 140 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51034**).



Flow Cytometry (Intracellular) - Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)



Western blot - Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling pan Cadherin with purified **ab51034** at 1/20 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51034**).

Anti-pan Cadherin antibody [EPR1792Y] - Intercellular Junction Marker (**ab51034**) at 1/50000 dilution (purified) + Mouse heart lysate at 15 µg

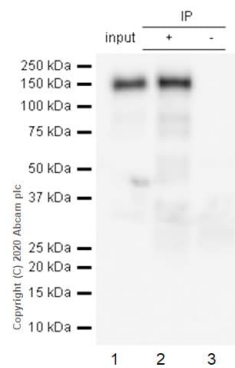
Secondary

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

Predicted band size: 100 kDa

Observed band size: 140 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51034**).



Immunoprecipitation - Anti-pan Cadherin antibody
[EPR1792Y] - BSA and Azide free (ab239839)

Purified **ab51034** at 1/20 dilution (0.6 µg) immunoprecipitating pan Cadherin in Rat heart lysate.

Lane 1 (input): Rat heart lysate 10 µg

Lane 2 (+): **ab51034** + Rat heart lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab51034** in Rat heart lysate.

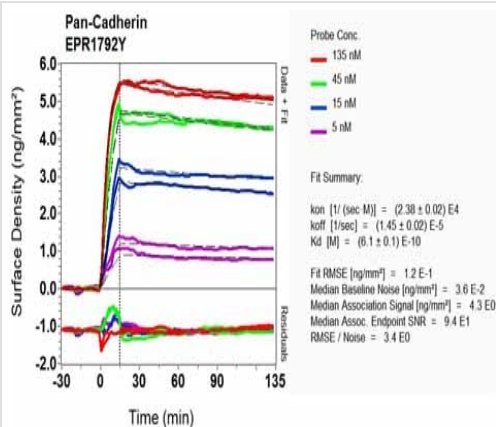
VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 140 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51034**).



SPR Scanning - Anti-pan Cadherin antibody
[EPR1792Y] - BSA and Azide free (ab239839)

Equilibrium dissociation constant (K_D)

Learn more about K_D

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51034**).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-pan Cadherin antibody [EPR1792Y] - BSA and Azide free (ab239839)

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