abcam

Product datasheet

Anti-Hydrogen Potassium ATPase Beta antibody [2G11] ab2866

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Overview		
Product name	Anti-Hydrogen Potassium ATPase Beta antibody [2G11]	
Description	Mouse monoclonal [2G11] to Hydrogen Potassium ATPase Beta	
Specificity	Detects the beta-subunit of hydrogen/potassium ATPase.	
Tested applications	Flow Cyt, IHC-P, ICC/IF, ICC, IHC-Fr, IP, WB, Inhibition Assay, ChIP	
Species reactivity	Reacts with: Mouse, Rat, Rabbit, Guinea pig, Cow, Dog, Human, Pig	
Immunogen	Full length native protein (purified) corresponding to Pig Hydrogen Potassium ATPase Beta. Purified 34 kDa core peptide from deglycosylated hog gastric microsomes.	
Epitope	This antibody recognizes an epitope between amino acid residues 1-13 or 15-28 located on the cytoplasmic side of the beta-subunit.	

Properties				
Form	Liquid			
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or - 80°C. Avoid freeze / thaw cycle.			
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS			
Purity	Ascites			
Clonality	Monoclonal			
Clone number	2G11			
lsotype	lgG1			

Applications

Our Abpromise guarantee covers the use of ab2866 in the following tested applications.

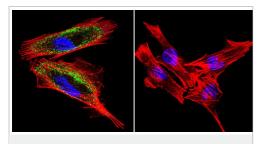
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/50.
IHC-P	****	1/2000.

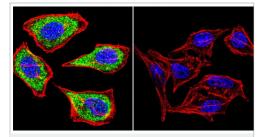
Application	Abreviews	Notes
ICC/IF		1/2000.
ICC		Use at an assay dependent concentration.
IHC-Fr		1/2000.
IP		Use at an assay dependent concentration.
WB		1/4000.
Inhibition Assay		Use at an assay dependent concentration.
ChIP		Use at an assay dependent concentration.

Target	
Function	Required for stabilization and maturation of the catalytic proton pump alpha subunit and may also involved in cell adhesion and establishing epithelial cell polarity.
Sequence similarities	Belongs to the X(+)/potassium ATPases subunit beta family.
Domain	The C-terminal lobe folds into an immunoglobulin-like domain and mediates cell adhesion properties.
Cellular localization	Cell membrane.

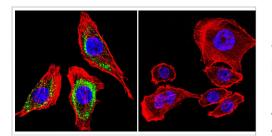
Anti-Hydrogen Potassium ATPase Beta antibody [2G11] images



Immunocytochemistry/ Immunofluorescence -Anti-Hydrogen Potassium ATPase Beta [2G11] antibody (ab2866) Immunocytochemistry/Immunofluorescence analysis of Hydrogen Potassium ATPase Beta shows staining in A2058 cells. Hydrogen Potassium ATPase Beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were incubated without (control) or with ab2866 (1:100) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated goat anti-mouse secondary antibody. Images were taken at 60X magnification.



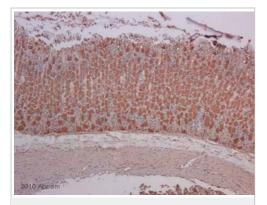
Immunocytochemistry/ Immunofluorescence -Anti-Hydrogen Potassium ATPase Beta [2G11] antibody (ab2866) Immunocytochemistry/Immunofluorescence analysis of Hydrogen Potassium ATPase Beta shows staining in HeLa cells. Hydrogen Potassium ATPase Beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were incubated without (control) or with ab2866 (1:200) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated goat anti-mouse secondary antibody. Images were taken at 60X magnification.



Immunocytochemistry/ Immunofluorescence -Anti-Hydrogen Potassium ATPase Beta [2G11] antibody (ab2866) Immunocytochemistry/Immunofluorescence analysis of Hydrogen Potassium ATPase Beta shows staining in U251 cells. Hydrogen Potassium ATPase Beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were incubated without (control) or with ab2866 (1:100) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated goat anti-mouse secondary antibody. Images were taken at 60X magnification.



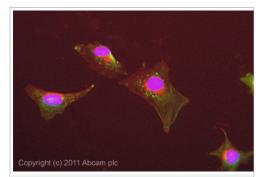
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Hydrogen Potassium ATPase Beta antibody [2G11] (ab2866) ab2866 diluted 1/200 on paraffin wax embedded section of gerbil stomach tissue.



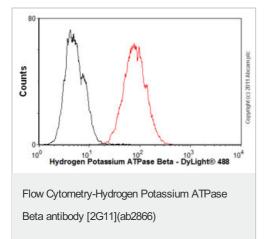
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Hydrogen Potassium ATPase Beta antibody [2G11] (ab2866)

This image is courtesy of an anonymous Abreview

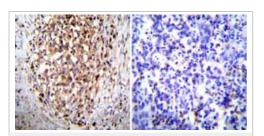
ab2866 staining Hydrogen Potassium ATPase Beta in mouse stomach tissue sections by IHC-P (formaldehyde-fixed paraffin-embedded sections). Tissue samples were fixed with formaldehyde and blocked with 4% serum for 30 minutes at 25°C; antigen retrival was by heat mediation in Citrate buffer. The sample was incubated with primary antibody (1/2500 in 4% serum) at 4°C for 16 hours. Ab6788 (1/500)was used as secondary antibody.



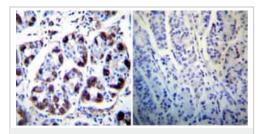
Immunocytochemistry/ Immunofluorescence-Hydrogen Potassium ATPase Beta antibody [2G11](ab2866) ICC/IF image of ab2866 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab2866, 10µg/ml) overnight at +4°C. The secondary antibody (green) was ab96879, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 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.



Overlay histogram showing LoVo cells stained with ab2866 (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 (ab2866, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat antimouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in LoVo cells fixed with 4% paraformaldehyde/permeabilized in 0.1% PBS-Tween used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-Hydrogen Potassium ATPase Beta antibody [2G11](ab2866) Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human gastric carcinoma tissues. 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 1:200 with a mouse monoclonal antibody recognizing Hydrogen/Potassium ATPase beta ab2866 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 biotinconjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-Hydrogen Potassium ATPase Beta antibody [2G11](ab2866)

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human stomach tissue tissues. 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 1:200 with a mouse monoclonal antibody recognizing Hydrogen/Potassium ATPase beta ab2866 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 biotinconjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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