

# Product datasheet

info@arigobio.com

# ARG42196 anti-PHF21A / BHC80 antibody

Package: 50 μg Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes PHF21A / BHC80

Tested Reactivity Hu, Ms, Rat

Tested Application FACS, IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name PHF21A / BHC80

Species Human

Immunogen Recombinant protein corresponding to M1-Q97 of Human PHF21A / BHC80.

Conjugation Un-conjugated

Alternate Names PHD finger protein 21A; BM-006; BHC80a; BHC80; BRAF35-HDAC complex protein BHC80

# **Application Instructions**

| Application table | Application   | Dilution       |
|-------------------|---|----------------|
|                   | FACS  | 1:150 - 1:500  |
|                   | IHC-P   | 1:200 - 1:1000 |
|                   | WB  | 1:500 - 1:2000 |
| Application Note  | IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                |
| Positive Control  | A549, Rat brain and Mouse brain   |                |
| Observed Size     | ~ 95 kDa  |                |

# **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.

Preservative 0.05% Sodium azide

Stabilizer 4% Trehalose
Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol PHF21A

Gene Full Name PHD finger protein 21A

Background The PHF21A gene encodes BHC80, a component of a BRAF35 (MIM 605535)/histone deacetylase

(HDAC; see MIM 601241) complex (BHC) that mediates repression of neuron-specific genes through the cis-regulatory element known as repressor element-1 (RE1) or neural restrictive silencer (NRS) (Hakimi

et al., 2002 [PubMed 12032298]).[supplied by OMIM, Nov 2010]

**Function** Component of the BHC complex, a corepressor complex that represses transcription of neuron-specific

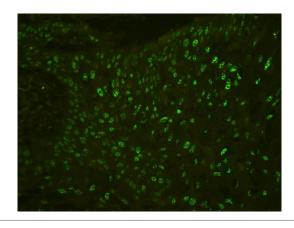
genes in non-neuronal cells. The BHC complex is recruited at RE1/NRSE sites by REST and acts by deacetylating and demethylating specific sites on histones, thereby acting as a chromatin modifier. In the BHC complex, it may act as a scaffold. Inhibits KDM1A-mediated demethylation of 'Lys-4' of histone

H3 in vitro, suggesting a role in demethylation regulation. [UniProt]

Calculated Mw 75 kDa

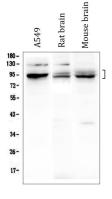
Cellular Localization Nucleus. [UniProt]

# **Images**



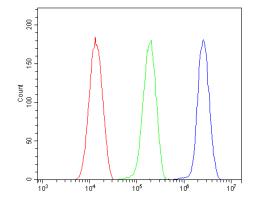
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human oesophagus squama cancer tissues. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



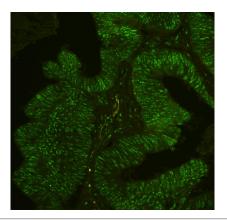
#### ARG42196 anti-PHF21A / BHC80 antibody WB image

Western blot: 50  $\mu g$  of samples under reducing conditions. A549, Rat brain and Mouse brain lysates stained with ARG42196 anti-PHF21A / BHC80 antibody at 0.5  $\mu g/ml$  dilution, overnight at 4°C.



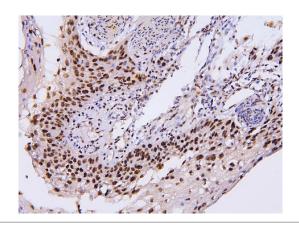
#### ARG42196 anti-PHF21A / BHC80 antibody FACS image

Flow Cytometry: HeLa cells were blocked with 10% normal goat serum and then stained with ARG42196 anti-PHF21A / BHC80 antibody (blue line) at 1  $\mu g/10^6$  cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green line) was Rabbit IgG (1  $\mu g/10^6$  cells) used under the same conditions. Unlabelled sample (red line) was also used as a control.



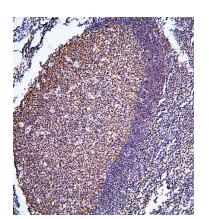
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



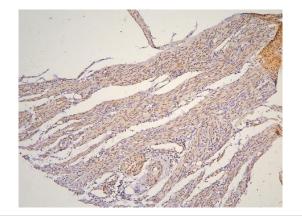
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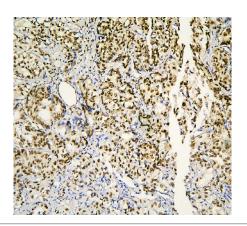
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



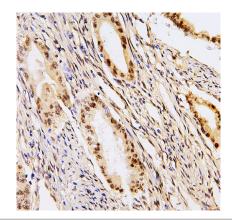
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human endometrial carcinoma tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



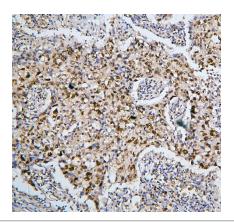
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human gastric cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



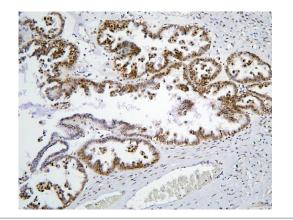
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



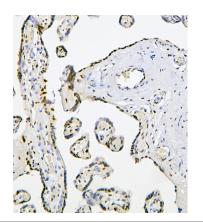
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



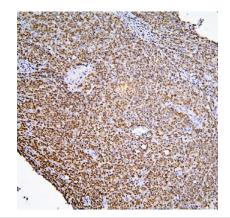
# ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human ovarian cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



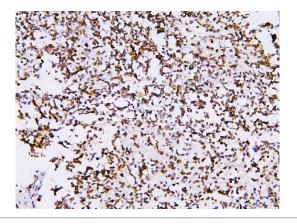
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



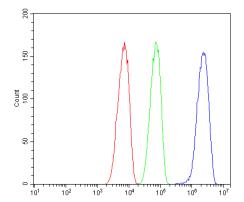
#### ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human sarcoma tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



# ARG42196 anti-PHF21A / BHC80 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human glioma tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42196 anti-PHF21A / BHC80 antibody at 1  $\mu g/ml$  dilution, overnight at 4°C.



# ARG42196 anti-PHF21A / BHC80 antibody FACS image

Flow Cytometry: SiHa cells were blocked with 10% normal goat serum and then stained with ARG42196 anti-PHF21A / BHC80 antibody (blue line) at 1  $\mu g/10^6$  cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green line) was Rabbit IgG (1  $\mu g/10^6$  cells) used under the same conditions. Unlabelled sample (red line) was also used as a control.