

### ID1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11717c

### Specification

# ID1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>P41134</u> <u>P41135</u>, <u>P20067</u>, <u>NP\_851998.1</u>, <u>NP\_002156.2</u> Human, Rat Mouse Rabbit Polyclonal Rabbit IgG 66-93

## ID1 Antibody (Center) - Additional Information

Gene ID 3397

**Other Names** 

DNA-binding protein inhibitor ID-1, Class B basic helix-loop-helix protein 24, bHLHb24, Inhibitor of DNA binding 1, Inhibitor of differentiation 1, ID1, BHLHB24, ID

#### Target/Specificity

This ID1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-93 amino acids of human ID1.

**Dilution** WB~~1:1000 IHC-P~~1:100 FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

ID1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **ID1** Antibody (Center) - Protein Information

Name ID1



## Synonyms BHLHB24, ID

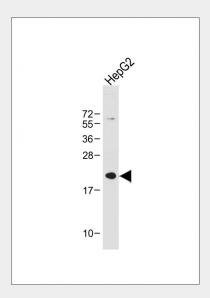
**Function** Transcriptional regulator (lacking a basic DNA binding domain) which negatively regulates the basic helix-loop-helix (bHLH) transcription factors by forming heterodimers and inhibiting their DNA binding and transcriptional activity. Implicated in regulating a variety of cellular processes, including cellular growth, senescence, differentiation, apoptosis, angiogenesis, and neoplastic transformation. Inhibits skeletal muscle and cardiac myocyte differentiation. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-BMAL1 heterodimer (By similarity).

**Cellular Location** Cytoplasm. Nucleus.

## ID1 Antibody (Center) - Protocols

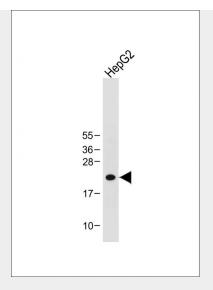
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- ID1 Antibody (Center) Images

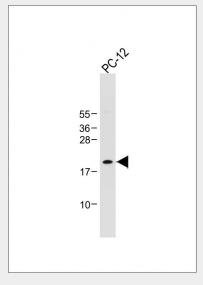


Anti-ID1 Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



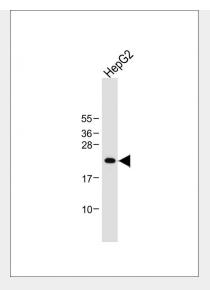


Anti-ID1 Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

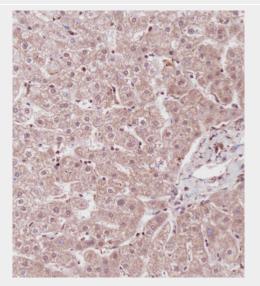


Anti-ID1 Antibody (Center) at 1:1000 dilution + PC-12 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



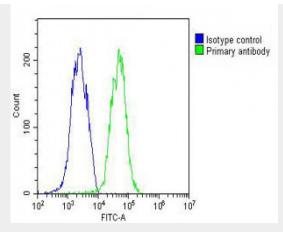


Anti-ID1 Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of AP11717c on paraffin-embedded Human liver tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.





Overlay histogram showing HepG2 cells stained with AP11717C (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11717C, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit lgG, **DyLight**® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG  $(1\mu g/1 \times 10^{6} \text{ cells})$  used under the same conditions. Acquisition of >10, 000 events was performed.

# ID1 Antibody (Center) - Background

The protein encoded by this gene is a helix-loop-helix (HLH) protein that can form heterodimers with members of the basic HLH family of transcription factors. The encoded protein has no DNA binding activity and therefore can inhibit the DNA binding and transcriptional activation ability of basic HLH proteins with which it interacts. This protein may play a role in cell growth, senescence, and differentiation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

# **ID1** Antibody (Center) - References

Qian, T., et al. Oncogene 29(43):5818-5827(2010) Hamajima, Y., et al. Cell Prolif. 43(5):457-463(2010) Yang, J., et al. Circ. Res. 107(2):252-262(2010) Phi, J.H., et al. J Neurosurg Pediatr 5(6):608-614(2010) Geng, H., et al. Cancer Res. 70(8):3239-3248(2010) **ID1 Antibody (Center) - Citations** 

 <u>MiR-199b-5p Suppresses Tumor Angiogenesis Mediated by Vascular Endothelial Cells in</u> <u>Breast Cancer by Targeting ALK1</u>