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ID1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11717c

Product Information

Application	IHC-P, WB, IF, FC, E
Primary Accession	P41134
Other Accession	P41135, P20067, NP_851998.1, NP_002156.2
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB29169
Calculated MW	16133
Antigen Region	66-93

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	IHC-P~~1:100 WB~~1:2000 IF~~1:10~50 FC~~1:25 E~~Use at an assay dependent concentration.
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.

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.

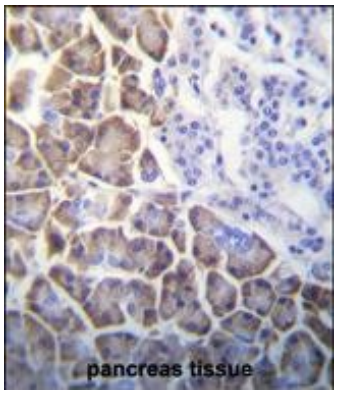
Background

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].

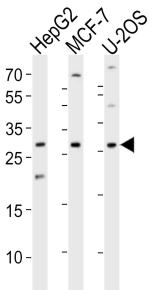
References

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)

Images

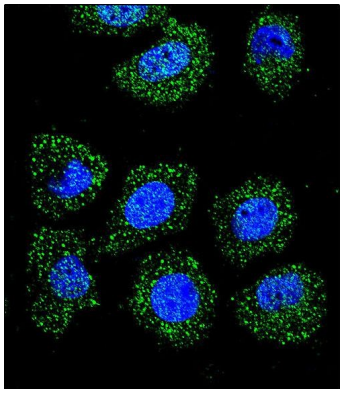


ID1 Antibody (Center) (Cat. #AP11717c)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ID1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

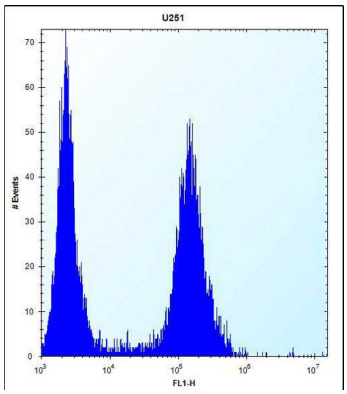


Western blot analysis of lysates from HepG2, MCF-7, U-2OS cell line (from left to right), using ID1 Antibody (Center)(Cat. #AP11717c). AP11717c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

Confocal immunofluorescent analysis of ID1 Antibody



(Center)(Cat#AP11717c) with U-251MG cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).



ID1 Antibody (Center) (Cat. #AP11717c) flow cytometric analysis of U251 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

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