

# ID1 Rabbit pAb

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Catalog # AP50188

## Product Information

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<b>Primary Accession</b>	<a href="#">P41134</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Mouse, Rat, Dog, Pig, Rabbit
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	16133
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human ID1 51-155/155
<b>Epitope Specificity</b>	IgG
<b>Isotype</b>	affinity purified by Protein A
<b>Purity</b>	
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Cytoplasm. Nucleus.
<b>SIMILARITY</b>	Contains 1 bHLH (basic helix-loop-helix) domain.
<b>SUBUNIT</b>	Heterodimer with other HLH proteins. Interacts with COPS5.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	ID proteins contain a helix-loop-helix (HLH) motif and regulate tissue-specific transcription within several cell lineages. They do not bind DNA directly, but inhibit lineage commitment by binding basic helix-loop-helix (bHLH) transcription factors through their HLH motif. ID proteins contribute to cell growth, senescence, differentiation and angiogenesis. Id1 mRNA is highly expressed in heart, lung and kidney and has lower expression in brain and liver. Two transcript variants encoding different isoforms have been found for this gene.

## Additional Information

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<b>Gene ID</b>	3397
<b>Other Names</b>	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
<b>Dilution</b>	ICC/IF=1:100-500, Flow-Cyt=1ug/Test
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Protein Information

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<b>Name</b>	ID1
<b>Synonyms</b>	BHLHB24, ID
<b>Function</b>	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).
<b>Cellular Location</b>	Cytoplasm. Nucleus.

## Background

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ID proteins contain a helix-loop-helix (HLH) motif and regulate tissue-specific transcription within several cell lineages. They do not bind DNA directly, but inhibit lineage commitment by binding basic helix-loop-helix (bHLH) transcription factors through their HLH motif. ID proteins contribute to cell growth, senescence, differentiation and angiogenesis. Id1 mRNA is highly expressed in heart, lung and kidney and has lower expression in brain and liver. Two transcript variants encoding different isoforms have been found for this gene.

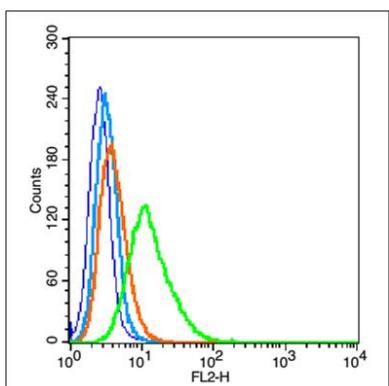
## References

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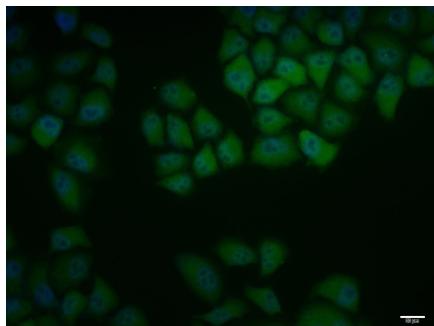
## Images

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Blank control (blue line): A549 (fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).  
Primary Antibody (green line): Rabbit Anti-ID1 antibody (AP50188), Dilution: 1  $\mu$ g /10<sup>6</sup> cells;  
Isotype Control Antibody (orange line): Rabbit IgG .  
Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1  $\mu$ g /test.

HeLa cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (ID1) polyclonal Antibody, Unconjugated (AP50188) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90



minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.