

ID1 Rabbit pAb

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Catalog # AP50188

Product Information

Primary Accession	P41134
Reactivity	Human
Predicted	Mouse, Rat, Dog, Pig, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	16133
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ID1
Epitope Specificity	51-155/155
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus.
SIMILARITY	Contains 1 bHLH (basic helix-loop-helix) domain.
SUBUNIT	Heterodimer with other HLH proteins. Interacts with COPS5.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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

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
Dilution	ICC/IF=1:100-500,Flow-Cyt=1ug/Test
Storage	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

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.

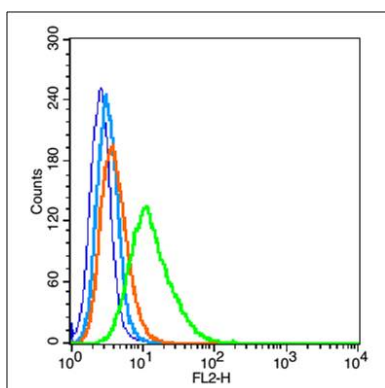
Background

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References

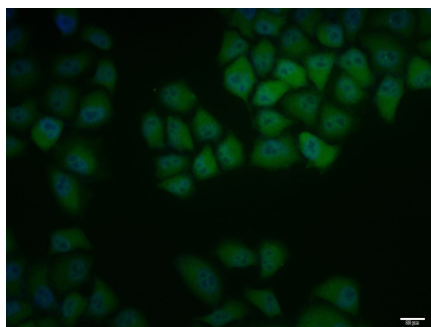
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Nehlin J.O.,et al.Biochem. Biophys. Res. Commun. 231:628-634(1997).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

Images



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 μ g /10⁶ cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1 μ 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'.