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ID3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58398

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q02535
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	12999
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ID3
Epitope Specificity	25-119/119
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	Nucleus.
SIMILARITY	Contains 1 bHLH (basic helix-loop-helix) domain.
SUBUNIT	Interacts with COPS5 and COPS7A (By similarity). Homodimer, and heterodimer with other HLH proteins.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ID (inhibitor of DNA binding) HLH proteins lack a basic DNA-binding domain but are able to form heterodimers with other HLH proteins, thereby inhibiting DNA binding. ID-3 inhibits the binding of E2A-containing protein complexes to muscle creatine kinase E-box enhancer. May inhibit other transcription factors.

Additional Information

Gene ID	3399
Other Names	DNA-binding protein inhibitor ID-3, Class B basic helix-loop-helix protein 25, bHLHb25, Helix-loop-helix protein HEIR-1, ID-like protein inhibitor HLH 1R21, Inhibitor of DNA binding 3, Inhibitor of differentiation 3, ID3, 1R21, BHLHB25, HEIR1
Target/Specificity	Expressed abundantly in lung, kidney and adrenal gland, but not in adult brain.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	ID3
Synonyms	1R21, BHLHB25, HEIR1
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. Involved in myogenesis by inhibiting skeletal muscle and cardiac myocyte differentiation and promoting muscle precursor cells proliferation. Inhibits the binding of E2A-containing protein complexes to muscle creatine kinase E-box enhancer. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-BMAL1 heterodimer.
Cellular Location	Nucleus.
Tissue Location	Expressed abundantly in lung, kidney and adrenal gland, but not in adult brain