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ID2 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI16264

Product Information

Application	WB
Primary Accession	Q02363
Other Accession	NM_002166, NP_002157
Reactivity	Human, Mouse, Rat, Pig, Bovine
Predicted	Human, Mouse, Rat, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14917

Additional Information

Gene ID	3398
Alias Symbol	GIG8, ID2A, ID2H, MGC26389, bHLHb26
Other Names	DNA-binding protein inhibitor ID-2, Class B basic helix-loop-helix protein 26, bHLHb26, Inhibitor of DNA binding 2, Inhibitor of differentiation 2, ID2, BHLHB26
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-ID2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	ID2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ID2
Synonyms	BHLHB26
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. Restricts the CLOCK and BMAL1 localization to the cytoplasm. Plays a role in both the input and output pathways of the circadian clock: in the input component, is involved in modulating the magnitude of photic entrainment and in the output component, contributes to the regulation of a variety of liver clock-controlled genes involved in lipid metabolism.
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P41136}. Nucleus {ECO:0000250|UniProtKB:P41136}
Tissue Location	Highly expressed in early fetal tissues, including those of the central nervous system

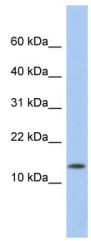
Background

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-ARNTL/BMAL1 heterodimer. Restricts the CLOCK and ARNTL/BMAL1 localization to the cytoplasm. Plays a role in both the input and output pathways of the circadian clock: in the input component, is involved in modulating the magnitude of photic entrainment and in the output component, contributes to the regulation of a variety of liver clock-controlled genes involved in lipid metabolism.

References

Hara E.,et al.J. Biol. Chem. 269:2139-2145(1994).
Biggs J.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:1512-1516(1992).
Kim J.Y.,et al.Mol. Endocrinol. 18:776-790(2004).
Ward S.M.,et al.J. Biol. Chem. 285:38987-39000(2010).

Images



WB Suggested Anti-ID2 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: Human Thymus