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HMGA2 Rabbit pAb

Catalog # AP100102

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P52926
Other Accession	P52926
Reactivity	Human
Predicted	Mouse, Rat, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	11832
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HMGA2
Epitope Specificity	41-109/109
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the HMGA family.Contains 3 A.T hook DNA-binding domains.
SUBUNIT	Interacts with E4F1. Interacts with NEK2 (By similarity).
Post-translational modifications	Regulated by cell cycle-dependent phosphorylation which alters its DNA binding affinity. Phosphorylated by NEK2.
DISEASE	Note=A chromosomal aberration involving HMGA2 is associated with a subclass of benign mesenchymal tumors known as lipomas. Translocation t(3;12)(q27-q28;q13-q15) with LPP is shown in lipomas. HMGA2 is also fused with a number of other genes in lipomas.Note=A chromosomal aberration involving HMGA2 is associated with pulmonary chondroid hamartomas. Translocation t(3;12)(q27-q28;q14-q15) with LPP is detected in pulmonary chondroid hamartomas.Note=A chromosomal aberration involving HMGA2 is associated with parosteal lipomas. Translocation t(3;12)(q28;q14) with LPP is also shown in one parosteal lipoma.Note=A chromosomal aberration involving HMGA2 is found in uterine leiomyoma. Translocation t(12;14)(q15;q23-24) with RAD51B. Chromosomal rearrangements involving HMGA2 do not seem to be the principle pathobiological mechanism in uterine leiomyoma.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a protein that belongs to the non-histone chromosomal high mobility group (HMG) protein family. HMG proteins function as architectural factors and are essential components of the enhancesome. This protein contains structural DNA-binding domains and may act as a transcriptional regulating factor. Identification of the deletion, amplification, and rearrangement of this gene that are associated with myxoid liposarcoma suggests a role in adipogenesis and mesenchymal differentiation. A gene knock out study of the mouse counterpart demonstrated that this gene is involved in diet-induced obesity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Additional Information

Gene ID	8091
Other Names	BABL; HMGI-C; HMGIC; LIPO; SRS5; STQTL9; 9430083A20Rik; pg; pygmy; HMGA2_HUMAN; HMGA2; High mobility group AT-hook protein 2; HMGA2_MOUSE; high mobility group AT-hook 2; high-mobility group (nonhistone chromosomal) protein isoform I-C
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	HMGA2
Synonyms	HMGIC
Function	Functions as a transcriptional regulator. Functions in cell cycle regulation through CCNA2. Plays an important role in chromosome condensation during the meiotic G2/M transition of spermatocytes. Plays a role in postnatal myogenesis, is involved in satellite cell activation (By similarity). Positively regulates IGF2 expression through PLAG1 and in a PLAG1-independent manner (PubMed:28796236).
Cellular Location	Nucleus.

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