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ING4 Rabbit pAb

Catalog # AP99611

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9UNL4
Other Accession	Q9UNL4
Predicted	Rat, Pig, Human, Mouse, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28530
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ING4
Epitope Specificity	21-120/249
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 ING family. Contains 1 PHD-type zinc finger.
SUBUNIT	Homodimer. Interacts with H3K4me3 and to a lesser extent with H3K4me2, the interaction augments HBO1 acetylation activity on H3 tails. Component of the HBO1 complex composed at least of ING4 or ING5, KAT7/HBO1, MEAF6, and one of PHF15, PHF16 and PHF17. Interacts with EP300, RELA and TP53; these interactions may be indirect. Interacts with EGLN1.
Post-translational modifications	Citrullination by PADI4 within the nuclear localization signal disrupts the interaction with p53 and increases susceptibility to degradation.
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 tumor suppressor protein that contains a PHD-finger, which is a common motif in proteins involved in chromatin remodeling. This protein can bind TP53 and EP300/p300, a component of the histone acetyl transferase complex, suggesting its involvement in the TP53-dependent regulatory pathway. Multiple alternatively spliced transcript variants have been observed that encode distinct proteins. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	51147
Other Names	my036; p29ING4; D6Wsu147e; D6Xrf92; ING4_HUMAN; ING4; ING4_MOUSE; inhibitor of growth family member 4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	ING4
Function	Component of HBO1 complexes, which specifically mediate acetylation of histone H3 at 'Lys-14' (H3K14ac), and have reduced activity toward histone H4 (PubMed:16387653). Through chromatin acetylation it may function in DNA replication (PubMed:16387653). May inhibit tumor progression by modulating the transcriptional output of signaling pathways which regulate cell proliferation (PubMed:15251430, PubMed:15528276). Can suppress brain tumor angiogenesis through transcriptional repression of RELA/NFKB3 target genes when complexed with RELA (PubMed:15029197). May also specifically suppress loss of contact inhibition elicited by activated oncogenes such as MYC (PubMed:15029197). Represses hypoxia inducible factor's (HIF) activity by interacting with HIF prolyl hydroxylase 2 (EGLN1) (PubMed:15897452). Can enhance apoptosis induced by serum starvation in mammary epithelial cell line HC11 (By similarity).
Cellular Location	Nucleus

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