

Rabbit Anti-ING4 antibody

SL10492R

Product Name:	ING4
Chinese Name:	ING4抗体
Alias:	Brain my036 protein; Candidate tumor suppressor p33 ING 1 homolog; Candidate tumor suppressor p33 ING-1 homolog; Candidate tumor suppressor p33 ING1 homolog; D6Wsu147e; D6Xrf92; ING 1 like protein; ING 4; ING-1 like protein; ING-4; ING1 like protein; ING4; ING4_HUMAN; Inhibitor of growth family member 4; Inhibitor of growth family member 4 long isoform; Inhibitor of growth protein 4; MGC12557; my036; p29 ING 4; p29 ING-4; p29 ING4; p29ING4; My036; inhibitor of growth protein 4 isoform 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ING4:21-120/249
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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].

Function:

Component of the HBO1 complex which has a histone H4-specific acetyltransferase activity, a reduced activity toward histone H3 and is responsible for the bulk of histone H4 acetylation in vivo. Through chromatin acetylation it may function in DNA replication. May inhibit tumor progression by modulating the transcriptional output of signaling pathways which regulate cell proliferation. Can suppress brain tumor angiogenesis through transcriptional repression of RELA/NFKB3 target genes when complexed with RELA. May also specifically suppress loss of contact inhibition elicited by activated oncogenes such as MYC. Represses hypoxia inducible factor's (HIF) activity by interacting with HIF prolyl hydroxylase 2 (EGLN1).

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.

Subcellular Location:

Nucleus.

Post-translational modifications:

Citrullination by PADI4 within the nuclear localization signal disrupts the interaction with p53 and increases susceptibility to degradation.

Similarity:

Belongs to the ING family.

Contains 1 PHD-type zinc finger.

SWISS:

O9UNL4

Gene ID:

51147

Database links:

Entrez Gene: 51147Human

Entrez Gene: 28019 Mouse

Entrez Gene: 297597Rat

Omim: 608524Human

SwissProt: Q9UNL4Human

SwissProt: Q8C0D7Mouse

Unigene: 524210Human

Unigene: 262547 Mouse

Unigene: 347910 Mouse

Unigene: 48967Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.