

ING3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56347

Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity	IHC-P, IHC-F, IF, ICC, E Q9NXR8 Rat, Pig, Dog, Bovine Rabbit Polyclonal 46743 Liquid KLH conjugated synthetic peptide derived from human ING3 341-418/418 IgG affinity purified by Protein A
Buffer SUBCELLULAR LOCATION SIMILARITY SUBUNIT	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Nuclear Belongs to the ING family.Contains 1 PHD-type zinc finger. Interacts with H3K4me3 and to a lesser extent with H3K4me2. Component of the NuA4 histone acetyltransferase complex which contains the catalytic subunit KAT5/TIP60 and the subunits EP400, TRRAP/PAF400, BRD8/SMAP, EPC1, DMAP1/DNMAP1, RUVBL1/TIP49, RUVBL2, ING3, actin, ACTL6A/BAF53A, MORF4L1/MRG15, MORF4L2/MRGX, MRGBP, YEATS4/GAS41, VPS72/YL1 and MEAE6. The NuA4 complex interacts with MYC and the adenovirus E1A
DISEASE	protein. HTATTIP/TIP60, EPC1, and ING3 together constitute a minimal HAT complex termed Piccolo NuA4. Squamous cell carcinoma of the head and neck (HNSCC) [MIM:275355]: A non-melanoma skin cancer affecting the head and neck. The hallmark of cutaneous SCC is malignant transformation of normal epidermal keratinocytes. Note=The disease may be caused by mutations affecting the
Important Note	gene represented in this entry. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications
Background Descriptions	ING3 belongs to a family of proteins containing the plant homeodomain (PHD) finger, which includes transcription factors and proteins that regulate chromatin structure. ING3 is a component of the NuA4 histone acetyltransferase (HAT) complex and can activate p53 trans-activated promoters, including promoters of p21/waf1 and bax. Overexpression of ING3 has been shown to inhibit cell growth and induce apoptosis. Allelic loss and reduced expression of the ING3 gene were detected in head and neck cancers.

Additional Information

Other Names	Inhibitor of growth protein 3, p47ING3, ING3
Target/Specificity	Expressed in brain, heart, kidney, liver, lung, ovaries, placenta, prostate, skeletal muscle, small intestine, spleen, testis and thymus.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=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	ING3
Function	Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage. Component of a SWR1-like complex that specifically mediates the removal of histone H2A.Z/H2AZ1 from the nucleosome.
Cellular Location	Nucleus.
Tissue Location	Expressed in brain, heart, kidney, liver, lung, ovaries, placenta, prostate, skeletal muscle, small intestine, spleen, testis and thymus

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.