

# ING4 Monoclonal antibody

Catalog Number: 67754-1-Ig

## Basic Information

<b>Catalog Number:</b> 67754-1-Ig	<b>GenBank Accession Number:</b> BC007781	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 51147	<b>CloneNo.:</b> 1A12A3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9UNL4	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF-P 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> inhibitor of growth family, member 4	
<b>Immunogen Catalog Number:</b> AG4610	<b>Calculated MW:</b> 29 kDa	
	<b>Observed MW:</b> 29 kDa	

## Applications

### Tested Applications:

WB, IHC, IF-P, ELISA

### Species Specificity:

Human, pig, rabbit, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB :** HEK-293 cells, pig brain tissue, rabbit brain tissue, rat brain tissue, HeLa cells, Jurkat cells, MOLT-4 cells, K-562 cells

**IHC :** human colon cancer tissue, human cervical cancer tissue

**IF-P :** human colon cancer tissue,

## Background Information

ING4, also named as p29ING4, belongs to the ING family. It is a 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. It may inhibit tumor progression by modulating the transcriptional output of signaling pathways which regulate cell proliferation. ING4 can suppress brain tumor angiogenesis through transcriptional repression of RELA/NFKB3 target genes when complexed with RELA. It 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). ING4 is a tumor suppressor gene that interacts with NFkB and represses its transcriptional activity. Several lines of evidence suggest that the tumor suppressor gene ING4, NFkB and its target genes matrix metalloproteases MMP-2, MMP-9 and u-PA are critically involved in tumor invasion.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

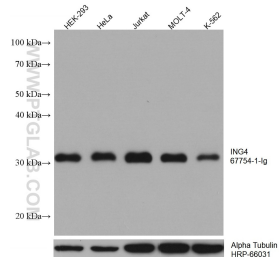
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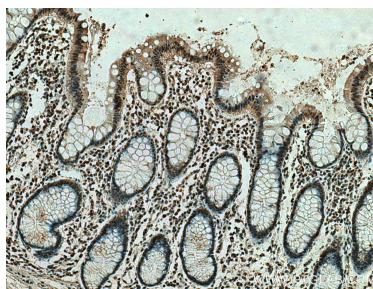
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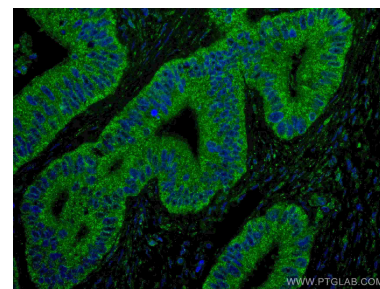
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67754-1-Ig (ING4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 67754-1-Ig (ING4 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human colon cancer tissue using ING4 antibody (67754-1-Ig, Clone: 1A12A3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).