

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ING1 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) ING2 and less than 1% cross-reactivity with rhING3, rhING4, and rhING5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human ING1 Met213-Ser327 Accession # Q9UK53
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

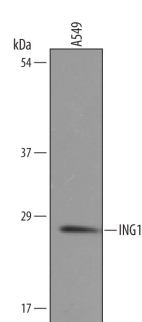
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

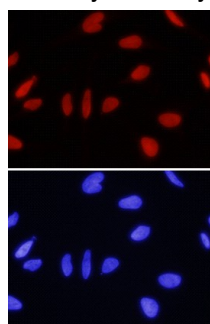
DATA

Western Blot



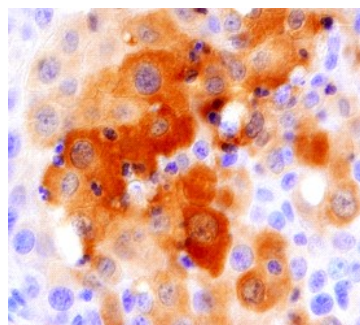
Detection of Human ING1 by Western Blot. Western blot shows lysates of A549 human lung carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human ING1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5758) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for ING1 at approximately 28 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Immunocytochemistry



ING1 in HeLa Human Cell Line. ING1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using 10 µg/mL Goat Anti-Human ING1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5758) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



ING1 in Human Lung Cancer Tissue. ING1 was detected in immersion fixed paraffin-embedded sections of human lung cancer tissue using 5 µg/mL Goat Anti-Human ING1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5758) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

ING1 (Inhibitor of Growth 1; also p33^{ING1b} and ING1A) is a 32 kDa member of the ING family of tumor suppressors. It is very widely expressed, and participates in multiple cell functions. When bound to p53, ING1 inhibits cell growth; when complexed to GADD45, ING1 enhances DNA nucleotide excision repair; and when associated with HAT, ING1 promotes hyperacetylation of histones H3 and H4. Human ING1 is 279 amino acids (aa) in length. It contains a PIP-PBD region (aa 5-45), an NLS (aa 142-158), and a plant homeodomain (PHD) (aa 210-259). Phosphorylation occurs on Ser126 and Ser199. There are at least three isoform variants. p47^{ING1a} contains a 190 aa substitution for aa 1-46, p27^{ING1d} shows a deletion of aa 2-45, and p24^{ING1c} has an alternate start site at Met70. Over aa 213-327, human ING1 shares 82% aa identity with mouse ING1.