

DESCRIPTION

| | |
|---------------------------|---|
| Species Reactivity | Human/Mouse |
| Specificity | Detects human and mouse ELF3. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human ELF3 |
| 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. |

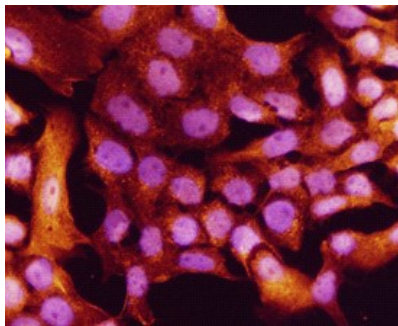
APPLICATIONS

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 |

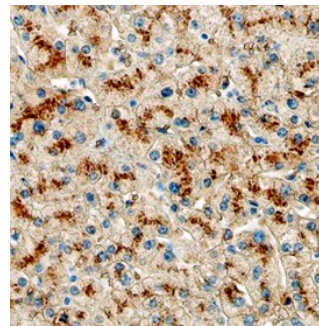
DATA

Immunocytochemistry



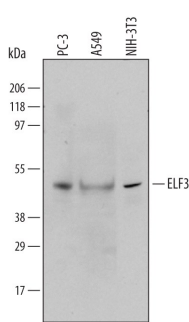
ELF3 in A431 Human Cell Line. ELF3 was detected in immersion fixed A431 human epithelial carcinoma cell line using 10 µg/mL Human/Mouse ELF3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5787) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



ELF3 in Human Liver. ELF3 was detected in immersion fixed paraffin-embedded sections of human liver using Human/Mouse ELF3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5787) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Western Blot



Detection of Human/Mouse ELF3 by Western Blot. Western blot shows lysates of PC-3 human prostate cancer cell line, A549 human lung carcinoma cell line, and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 1 µg/mL of Human/Mouse ELF3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5787) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for ELF3 at approximately 42 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

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

ELF3 (E74-Like Factor 3; also ESE-1, ESX, ERT and JEN) is a 41-43 kDa member of the ETS family of proteins. During uncomplicated (non-inflammatory) periods of cell differentiation, ELF3 is expressed exclusively by epithelial cells, repressing genes needed during early differentiation, and promoting genes needed for full differentiation. Under conditions of inflammation, cells such as monocytes, endothelial cells and chondrocytes will express ELF3 and produce molecules such as Ang1 and COX2. Human ELF3 is 371 amino acids (aa) in length. It contains one PNT/pointed dimerization domain (aa 46-132), a protein stabilizing PEST sequence (aa 210-225), an A/T Hook region that binds to AT-rich DNA sequences (aa 236-252), and an ETS DNA binding domain (aa 273-355). ELF3 interacts with CREBBP, EP300, KU70 and KU86. There is one splice variant that shows a deletion of aa 174-200. Over aa 1-173, human ELF3 shares 87% aa identity with mouse ELF3.