

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human E2F-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human E2F-2, -3, -4, -5, -6, -7, and -8 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human E2F-1 Val264-Phe437 Accession # Q01094
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

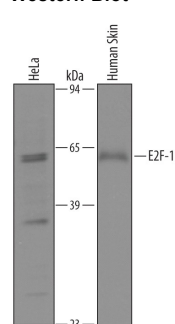
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

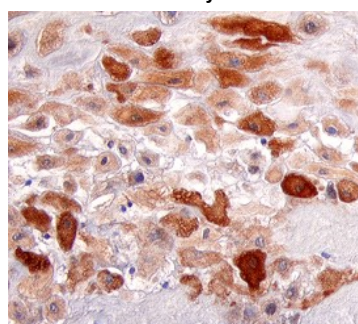
## DATA

### Western Blot



**Detection of Human E2F-1 by Western Blot.** Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and human skin tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human E2F-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4825) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for E2F-1 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

### Immunohistochemistry



**E2F-1 in Human Placenta.** E2F-1 was detected in immersion fixed paraffin-embedded sections of human placenta using 5 µg/mL Sheep Anti-Human E2F-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4825) overnight at 4 °C. Tissue was stained with the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

E2F-1 (adenovirus E2 gene promoter region binding factor 1; also retinoblastoma [RB]-binding protein 3/RBP3) is a 57 - 60 kDa nuclear member of the E2F/DP family of transcription factors. It has a dual function, mediating both cell proliferation and apoptosis in a context-dependent manner. Human E2F-1 is 437 amino acids (aa) in length. It contains a cyclin A: CDK2 binding site (aa 67 - 108), a DNA-binding region (aa 110 - 194), and an RB protein binding motif (aa 409 - 426) that, when engaged, inactivates E2F-1. There is one potential in-frame 23 aa substitution for aa 89 - 111. Over aa 264 - 437, human E2F-1 shows 89% and 80% aa identity to canine and mouse E2F-1, respectively.