

**DESCRIPTION**

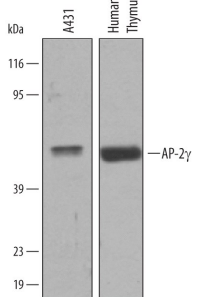
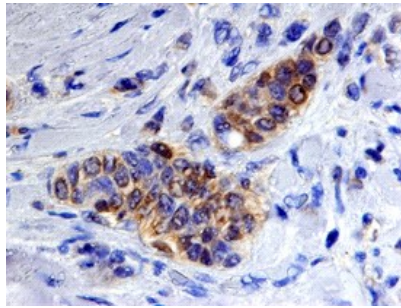
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human AP-2 $\gamma$ in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human (rh) AP-2 $\alpha$ , $\beta$ , $\epsilon$ and less than 1% cross-reactivity with rhAP-2 $\delta$ is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human AP-2 $\gamma$ Leu128-Val223 Accession # Q92754
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m 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 $\mu$ g/mL	See Below
<b>Immunohistochemistry</b>	5-15 $\mu$ g/mL	See Below

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Human AP-2<math>\gamma</math> by Western Blot.</b> Western blot shows lysates of A431 human epithelial carcinoma cell line and human thymus tissue. PVDF membrane was probed with 1 <math>\mu</math>g/mL of Goat Anti-Human AP-2<math>\gamma</math> Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5059) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for AP-2<math>\gamma</math> at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 8</i>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>AP-2<math>\gamma</math> in Human Breast Cancer Tissue.</b> AP-2<math>\gamma</math> was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using 10 <math>\mu</math>g/mL Goat Anti-Human AP-2<math>\gamma</math> Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5059) 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 with the Anti-Goat HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for <i>Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</i>.</p>
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**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**

AP-2 $\gamma$  (Activation protein 2 gamma; also ERF-1) is a 50-55 kDa member of the AP-2 transcription factor family. It is essential for kidney development and placentation of the embryo. In the nucleus, it forms homodimers and heterodimers with other AP-2 family members. Elevated AP-2 family members are highly suggestive of neoplasia. Human AP-2 $\gamma$  is 450 amino acids in length. It contains a repressor SUMOylation site as Lys10, a Gln/Pro-rich transactivation domain (aa 30-119) and a helix-span-helix dimerization region (aa 293-424). One potential splice form exists that shows a four aa substitution for the N-terminal 16 aa, followed by a premature truncation after Gly130. Over aa 128-223, human AP-2 $\gamma$  shares 91% and 82% aa sequence identity with porcine and mouse AP-2 $\gamma$ , respectively.