

**#3208** Store at  $-20^{\circ}\text{C}$

# AP-2 $\alpha$ Antibody

100  $\mu\text{l}$   
 (10 Western mini-blot)



**Orders** ■ 877-616-CELL (2355)  
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**Support** ■ 877-678-TECH (8324)  
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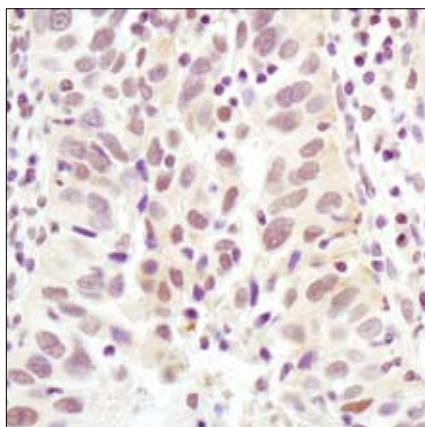
This product is for *in vitro* research use only and is not intended for use in humans or animals.  
 This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source**
W, IP, IHC-P Endogenous	H, M, R, Mk	48 kDa	Rabbit

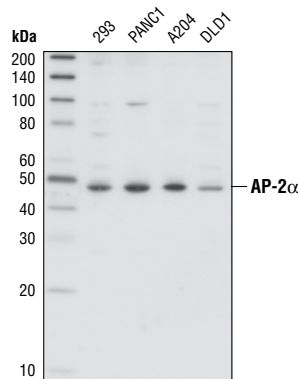
**Background:** The sequence-specific transcription factor activator protein 2 $\alpha$  (AP-2 $\alpha$ ) is required for normal growth and morphogenesis during mammalian development (1,2). Decreased or loss of AP-2 $\alpha$  expression has been observed in many different types of human cancers including breast cancer (3,4), ovarian cancer (5), melanoma (6) and prostate cancer (7). These findings suggest that AP-2 $\alpha$  expression plays a crucial role in tumorigenicity. Studies have also shown that p53 overexpression in human breast carcinoma cells induces the level of AP-2 $\alpha$  expression. Furthermore, p53 binds to the cis-element in the AP-2 $\alpha$  promoter, suggesting that AP-2 $\alpha$  is a target of p53. AP-2 $\alpha$  may mediate the effect of p53 to inhibit cell proliferation (8).

**Specificity/Sensitivity:** AP-2 $\alpha$  Antibody detects endogenous levels of total AP-2 $\alpha$  protein.

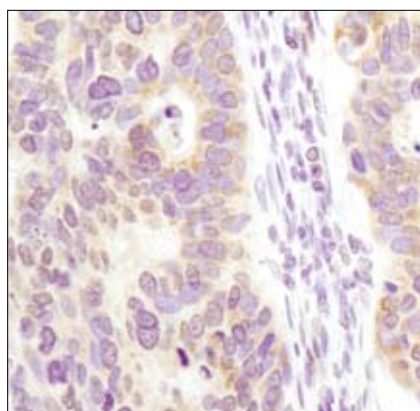
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) derived from a sequence of human AP-2 $\alpha$ . Antibodies are purified by protein A and peptide affinity chromatography.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma, using AP-2 $\alpha$  Antibody.



Western blot analysis of extracts from various cell lines, using AP-2 $\alpha$  Antibody.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma, using AP-2 $\alpha$  Antibody.

**Entrez-Gene ID** #7020  
**Swiss-Prot Acc.** #P05549

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu\text{g}/\text{ml}$  BSA and 50% glycerol. Store at  $-20^{\circ}\text{C}$ . Do not aliquot the antibody.

**\*Species cross-reactivity is determined by Western blot.**  
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

Western blotting 1:1000  
 Immunoprecipitation 1:50  
 Immunohistochemistry (Paraffin) 1:300

**IHC protocol:** Unmasking buffer/Antibody diluent Citrate/ SignalStain<sup>®</sup> Antibody Diluent #8112

**For application specific protocols please see the web page for this product at [www.cellsignaling.com](http://www.cellsignaling.com).**

**Companion Products:**

- SignalStain<sup>®</sup> Antibody Diluent #8112
- Phototope<sup>®</sup>-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071
- Anti-rabbit IgG, HRP-linked Antibody #7074
- Prestained Protein Marker, Broad Range (Premixed Format) #7720
- Biotinylated Protein Ladder Detection Pack #7727
- 20X LumiGLO<sup>®</sup> Reagent and 20X Peroxide #7003

**Please visit [www.cellsignaling.com](http://www.cellsignaling.com) for a complete listing of recommended companion products.**

**Background References:**

- (1) Mitchell, P.J. et al. (1987) *Cell* 50, 847–861.
- (2) Williams, T. and Tjian, R. (1991) *Genes Dev.* 5, 670–682.
- (3) Douglas, D.B. et al. (2004) *Cancer Res.* 64, 1611–1620.
- (4) Gee, J.M. et al. (1999) *J. Pathol.* 189, 514–520.
- (5) Anttila, M.A. et al. (2000) *Br. J. Cancer.* 82, 1974–1983.
- (6) Jean, D. et al. (1998) *J. Biol. Chem.* 273, 16501–16508.
- (7) Ruiz, M. et al. (2004) *Cancer Res.* 64, 631–638.
- (8) Li, H. et al. (2006) *Oncogene*, EPub ahead of Print

**IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E—ELISA E-P—ELISA Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebra fish B—bovine  
 Dg—Dog Pg—Pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% sequence homology.