AP-2γ (m): 293T Lysate: sc-126419



The Power to Question

BACKGROUND

AP-2 transcription factor family members include AP-2 α , AP-2 β and AP-2 γ , which specifically bind to the DNA consensus sequence CCCCAGGC and initiate transcription of selected genes. AP-2, also known as ERF-1, plays a role in regulating estrogen receptor expression. AP- 2β , a splice variant of AP- 2α , inhibits AP-2 activity. Besides subscribing to the AP-2 complex, AP-2 α , AP-2 β and AP-2y proteins compose the OB2-1 transcription factor complex. OB2-1 specifically upregulates expression of the proto-oncogene c-ErbB-2, which is overexpressed in 25-30% of breast cancers. The gene encoding AP-2 α maps to human chromosome 6p24.3. AP-2 α may play an important role in the development of ectodermal-derived tissues. Deleterious mutations involving the AP- 2α gene are linked to microphthalmia, corneal clouding and other anterior eye chamber defects. The ubiquitously expressed AP-4 transcription factor specifically binds to the DNA consensus sequence 5'-CAGCTG-3'. AP-4 interacts with promoters for immunoglobulin- κ gene families and simian virus 40. AP-4 may enhance the transcription of the human Huntington's disease gene. AP-4 is a helix-loop-helix protein that contains two distinctive leucine repeat elements.

REFERENCES

- Williams, T., et al. 1988. Cloning and expression of AP-2, a cell-type-specific transcription factor that activates inducible enhancer elements. Genes Dev. 2: 1557-1569.
- Buettner, R., et al. 1993. An alternatively spliced mRNA from the AP-2 gene encodes a negative regulator of transcriptional activation by AP-2. Mol. Cell. Biol. 13: 4174-4185.
- Moser, M., et al. 1995. Cloning and characterization of a second AP-2 transcription factor: AP-2β. Development 121: 2779-2788.
- 4. Bosher, J.M., et al. 1996. A family of AP-2 proteins regulates c-ErbB-2 expression in mammary carcinoma. Oncogene 13: 1701-1707.
- 5. Williamson, J.A., et al. 1996. Chromosomal mapping of the human and mouse homologues of two new members of the AP-2 family of transcription factors. Genomics 35: 262-264.
- McPherson, L.A., et al. 1997. Identification of ERF-1 as a member of the AP-2 transcription factor family. Proc. Natl. Acad. Sci. USA 94: 4342-4347.
- Eloranta, J.J., et al. 2002. Transcription factor AP-2 interacts with the SUMO-conjugating enzyme UBC9 and is sumolated *in vivo*. J. Biol. Chem. 277: 30798-30804.

CHROMOSOMAL LOCATION

Genetic locus: Tcfap2c (mouse) mapping to 2 H3.

PRODUCT

AP-2 γ (m): 293T Lysate represents a lysate of mouse AP-2 γ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

AP-2 γ (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive AP-2 γ antibodies. Recommended use: 10-20 μ l per lane.

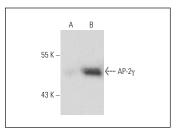
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

AP-2 γ (AP2g 6E4/4): sc-53162 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse AP-2 γ expression in AP-2 γ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



AP-2 γ (AP2g 6E4/4): sc-53162. Western blot analysis of AP-2 γ expression in non-transfected: sc-117752 (**A**) and mouse AP-2 γ transfected: sc-126419 (**B**) 293T whole cell Ivsates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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