# AP-4 (h): 293T Lysate: sc-176202



The Power to Question

#### **BACKGROUND**

AP-2 transcription factor family members include AP-2 $\alpha$ , AP-2 $\beta$  and AP-2 $\gamma$ , 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- $2\beta$ , a splice variant of AP- $2\alpha$ , inhibits AP-2 activity. Besides subscribing to the AP-2 complex, AP-2 $\alpha$ , AP-2 $\beta$ 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-2lpha maps to human chromosome 6p24.3. AP-2 $\alpha$  may play an important role in the development of ectodermal-derived tissues. Deleterious mutations involving the AP- $2\alpha$  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- $\kappa$  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**

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## CHROMOSOMAL LOCATION

Genetic locus: TFAP4 (human) mapping to 16p13.3.

#### **PRODUCT**

AP-4 (h): 293T Lysate represents a lysate of human AP-4 transfected 293T cells and is provided as 100  $\mu g$  protein in 200  $\mu l$  SDS-PAGE buffer.

#### **APPLICATIONS**

AP-4 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive AP-4 antibodies. Recommended use: 10-20 µl per lane.

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

#### **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.

#### **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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