AP-2 transcription factor family members include AP-2α, AP-2β and AP-2γ which specifically bind to the DNA consensus sequence CCCAGGG and initiate transcription of selected genes. AP-2, also known as eRF1, plays a role in regulating estrogen receptor expression. A splice variant of AP-2α, AP-2β, inhibits AP-2 activity. Besides subscribing to the AP-2 complex, AP-2α, AP-2β and AP-2γ 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-2α maps to human chromosome 6p24. AP-2α 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 contains two distinctive leucine repeat elements.

AP-2α (C-18): sc-184

**BACKGROUND**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SOURCE**

AP-2α (C-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of AP-2α of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.2% stabilizer protein. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-184 X, 100 µg/0.1 ml. Blocking peptide available for competition studies, sc-184 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

AP-2α (C-18) is recommended for detection of AP-2α and, to a lesser extent, AP-2β and AP-2γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

AP-2α (C-18) is also recommended for detection of AP-2α and to a lesser extent, AP-2β and AP-2γ in additional species, including equine, canine, bovine, porcine and avian.

AP-2α (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

**MOLECULAR WEIGHT OF AP-2α: 48 kDa.**

Positive Controls: ZR-75-1 cell lysate: sc-2241, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

**RESEARCH USE**

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

**SELECT PRODUCT CITATIONS**