

# EAPP (1E4): sc-130357

## BACKGROUND

E2F transcription factors play a major role in apoptosis and cell proliferation and are found to be frequently deregulated in cancers. Through interactions with cell cycle regulators such as cyclins, cyclin-dependent kinases and retinoblastoma protein (Rb), E2F family members also integrate cell cycle progression. EAPP (E2F-associated phosphoprotein) is a 285 amino acid highly phosphorylated nuclear protein that fine-tunes E2F activities by interacting with E2F-1, E2F-2 and E2F-3, but not E2F-4. By binding to the N-terminal domain of these E2F family members, EAPP interferes with the binding of cyclin A, Sp1 transcription factors, EBP1 and EBP2, therefore influencing E2F activity. Interestingly, EAPP is expressed during the cell cycle, but disappears during mitosis, suggesting that this step is necessary to complete the cell cycle. EAPP is ubiquitously expressed, with highest levels found in placenta, pancreas, skeletal muscle and heart.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: EAPP (human) mapping to 14q13.1; Eapp (mouse) mapping to 12 C1.

## SOURCE

EAPP (1E4) is a mouse monoclonal antibody raised against amino acids 1-140 of EAPP of human origin.

## PRODUCT

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

EAPP (1E4) is recommended for detection of EAPP 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for EAPP siRNA (h): sc-92116, EAPP siRNA (m): sc-143265, EAPP shRNA Plasmid (h): sc-92116-SH, EAPP shRNA Plasmid (m): sc-143265-SH, EAPP shRNA (h) Lentiviral Particles: sc-92116-V and EAPP shRNA (m) Lentiviral Particles: sc-143265-V.

Molecular Weight (predicted) of EAPP: 33 kDa.

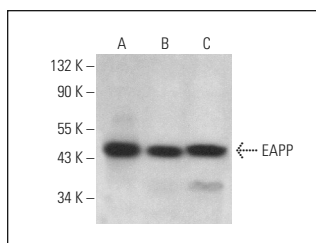
Molecular Weight (observed) of EAPP: 44 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, NIH/3T3 whole cell lysate: sc-2210 or RAW 264.7 whole cell lysate: sc-2211.

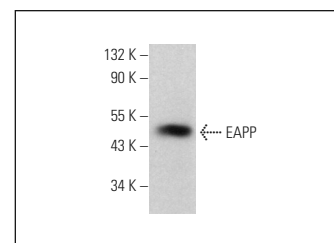
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



EAPP (1E4): sc-130357. Western blot analysis of EAPP expression in HEK293 (A), NIH/3T3 (B) and RAW 264.7 (C) whole cell lysates.



EAPP (1E4): sc-130357. Western blot analysis of EAPP expression in HeLa whole cell lysate.

## STORAGE

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

## RESEARCH USE

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