

## EAP1 (E-12): sc-164252

### BACKGROUND

EAP1 (enhanced at puberty protein 1), also known as IRF2BPL (interferon regulatory factor 2 binding protein-like) or C14orf4, is a 796 amino acid protein belonging to the IRF2BP family. Localizing to nucleus, EAP1 is highly expressed in heart, with moderate expression in skeletal muscle and pancreas, and weak expression found in brain, kidney, liver, testis, thyroid gland and lymphocytes. Expression levels of EAP1 increase during puberty, notably in medial basal hypothalamus. Thought to contribute to female reproductive function as an upstream transcriptional regulator of neuronal networks, EAP1 may also participate in gene transcription as an activator of GnRH I promoter and as a repressor of the synenkephalin promoter. The gene encoding EAP1 maps to human chromosome 14q24.3. Chromosome 14 contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA.

### REFERENCES

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- Li, F., et al. 2007. Eap1p, an adhesin that mediates *Candida albicans* biofilm formation *in vitro* and *in vivo*. *Eukaryot. Cell* 6: 931-939.
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- Yeung, K.T., et al. 2011. A novel transcription complex that selectively modulates apoptosis of breast cancer cells through regulation of FASTKD2. *Mol. Cell. Biol.* 31: 2287-2298.

### CHROMOSOMAL LOCATION

Genetic locus: IRF2BPL (human) mapping to 14q24.3; 6430527G18Rik (mouse) mapping to 12 D2.

### SOURCE

EAP1 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EAP1 of human origin.

### STORAGE

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

### PRODUCT

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

Blocking peptide available for competition studies, sc-164252 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

EAP1 (E-12) is recommended for detection of EAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EAP1 (E-12) is also recommended for detection of EAP1 in additional species, including bovine and porcine.

Suitable for use as control antibody for EAP1 siRNA (h): sc-92164, EAP1 siRNA (m): sc-140455, EAP1 shRNA Plasmid (h): sc-92164-SH, EAP1 shRNA Plasmid (m): sc-140455-SH, EAP1 shRNA (h) Lentiviral Particles: sc-92164-V and EAP1 shRNA (m) Lentiviral Particles: sc-140455-V.

Molecular Weight of EAP1: 83 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.