

## EAP1 (C-13): sc-164251

### 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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3. Drögemüller, C., et al. 2004. Mapping of the bovine homologue of the human chromosome 14 open reading frame 4 gene to BTA10q36. *Anim. Genet.* 35: 498-499.
4. Li, F., et al. 2007. Eap1p, an adhesin that mediates *Candida albicans* biofilm formation *in vitro* and *in vivo*. *Eukaryot. Cell* 6: 931-939.
5. Heger, S., et al. 2007. Enhanced at puberty 1 is a new transcriptional regulator of the female neuroendocrine reproductive axis. *J. Clin. Invest.* 117: 2145-2154.
6. Li, F. and Palecek, S.P. 2008. Distinct domains of the *Candida albicans* adhesin Eap1p mediate cell-cell and cell-substrate interactions. *Microbiology* 154: 1193-1203.
7. Matagne, V., et al. 2009. Hypothalamic expression of Eap1 is not directly controlled by ovarian steroids. *Endocrinology* 150: 1870-1878.
8. 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 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-164251 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

EAP1 (C-13) 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), 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

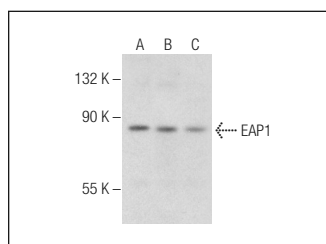
EAP1 (C-13) is also recommended for detection of EAP1 in additional species, including bovine and porcine.

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.

Positive Controls: Jurkat nuclear extract: sc-2132, MCF7 nuclear extract: sc-2149 or K-562 nuclear extract: sc-2130.

### DATA



EAP1 (C-13): sc-164251. Western blot analysis of EAP1 expression in Jurkat (A), MCF7 (B) and K-562 (C) nuclear extracts.

### 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.



Try **EAP1 (C-9): sc-514772**, our highly recommended monoclonal alternative to EAP1 (C-13).