

# SYAP1 (E-13): sc-133411

## BACKGROUND

SYAP1 (synapse-associated protein 1) is a 365 amino acid protein that is ubiquitously expressed in adult tissues. SYAP1 contains one BSD domain which is a novel domain that is present in basal transcription factors, synapse-associated proteins and several hypothetical proteins. The BSD domain is characterized by three predicted alpha helices and by conserved tryptophan and phenylalanine residues, located at the C-terminus of the domain. The gene that encodes SYAP1 in humans is located on chromosome X. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

## REFERENCES

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2. Bernardino-Sgheri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
3. Doerks, T., et al. 2002. BSD: a novel domain in transcription factors and synapse-associated proteins. *Trends Biochem. Sci.* 27: 168-170.
4. Huang, K.M., et al. 2004. Organization and annotation of the Xcat critical region: elimination of seven positional candidate genes. *Genomics* 83: 893-901.
5. Al-Dhaheeri, M.H., et al. 2006. Identification of novel proteins induced by estradiol, 4-hydroxytamoxifen and acolbifene in T47D breast cancer cells. *Steroids* 71: 966-978.
6. Hayashi, T., et al. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. *Vis. Neurosci.* 23: 411-417.
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## CHROMOSOMAL LOCATION

Genetic locus: SYAP1 (human) mapping to Xp22.2; Syap1 (mouse) mapping to X F4.

## SOURCE

SYAP1 (E-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of SYAP1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133411 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SYAP1 (E-13) is recommended for detection of SYAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SYAP1 (E-13) is also recommended for detection of SYAP1 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for SYAP1 siRNA (h): sc-90867, SYAP1 siRNA (m): sc-153966, SYAP1 shRNA Plasmid (h): sc-90867-SH, SYAP1 shRNA Plasmid (m): sc-153966-SH, SYAP1 shRNA (h) Lentiviral Particles: sc-90867-V and SYAP1 shRNA (m) Lentiviral Particles: sc-153966-V.

Molecular Weight (predicted) of SYAP1: 40 kDa.

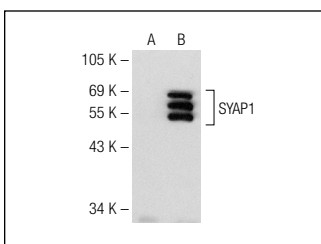
Molecular Weight (observed) of SYAP1: 53 kDa.

Positive Controls: SYAP1 (h): 293T Lysate: sc-178006.

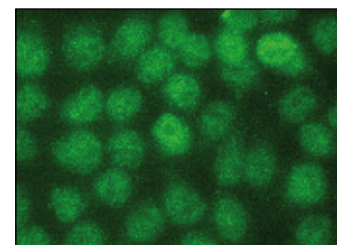
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



SYAP1 (E-13): sc-133411. Western blot analysis of SYAP1 expression in non-transfected: sc-117752 (A) and human SYAP1 transfected: sc-178006 (B) 293T whole cell lysates



SYAP1 (E-13): sc-133411. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

## 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.