

# YY1AP1 (G-12): sc-160932

## BACKGROUND

YY1AP1 (YY1 associated protein 1), also known as HCCA2 (hepatocellular carcinoma-associated protein 2) or YY1AP, is a 796 amino acid protein that localizes to both the nucleus and the cytoplasm and exists as seven alternatively spliced isoforms. Expressed ubiquitously with notable expression in lung, brain, spleen, pancreas, small intestine, heart, colon and skeletal muscle, YY1AP1 interacts with and enhances the transcriptional activation activity of YY1. YY1AP1 is expressed at high levels in liver carcinomas, suggesting a role in tumor transformation and metastasis. The gene encoding YY1AP1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

1. Wang, Z.X., et al. 2001. Identification and characterization of a novel human hepatocellular carcinoma-associated gene. *Br. J. Cancer* 85: 1162-1167.
2. Zeng, J.Z., et al. 2002. Molecular cloning and characterization of a novel gene which is highly expressed in hepatocellular carcinoma. *Oncogene* 21: 4932-4943.
3. Wang, C.Y., et al. 2004. YY1AP, a novel co-activator of YY1. *J. Biol. Chem.* 279: 17750-17755.
4. Kuryshv, V.Y., et al. 2006. An anthropoid-specific segmental duplication on human chromosome 1q22. *Genomics* 88: 143-151.
5. Ohtomo, T., et al. 2007. Molecular cloning of a structural homolog of YY1AP, a co-activator of the multifunctional transcription factor YY1. *Amino Acids* 33: 645-652.
6. Li, L., et al. 2007. Hepatocellular carcinoma-associated gene 2 interacts with MAD2L2. *Mol. Cell. Biochem.* 304: 297-304.
7. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 607860. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: YY1AP1 (human) mapping to 1q22.

## SOURCE

YY1AP1 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of YY1AP1 of human origin.

## 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-160932 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

YY1AP1 (G-12) is recommended for detection of YY1AP1 of 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).

Suitable for use as control antibody for YY1AP1 siRNA (h): sc-78797, YY1AP1 shRNA Plasmid (h): sc-78797-SH and YY1AP1 shRNA (h) Lentiviral Particles: sc-78797-V.

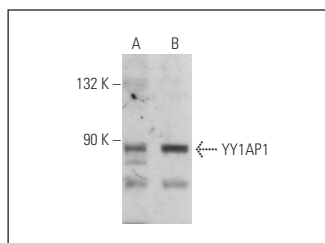
Molecular Weight of YY1AP1: 90 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218 or HeLa whole cell lysate: sc-2200.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



YY1AP1 (G-12): sc-160932. Western blot analysis of YY1AP1 expression in HeLa (A) and SK-BR-3 (B) whole cell lysates.

## 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.

## PROTOCOLS

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