

SP3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14413C

Specification

SP3 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q02447</u> <u>NP_003102.1</u>, <u>NP_001166183.1</u> Human Rabbit Polyclonal Rabbit IgG 81925 292-321

SP3 Antibody (Center) - Additional Information

Gene ID 6670

Other Names Transcription factor Sp3, SPR-2, SP3

Target/Specificity

This SP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 292-321 amino acids from the Central region of human SP3.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions SP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SP3 Antibody (Center) - Protein Information

Name SP3

Function Transcriptional factor that can act as an activator or repressor depending on isoform



and/or post-translational modifications. Binds to GT and GC boxes promoter elements. Competes with SP1 for the GC-box promoters. Weak activator of transcription but can activate a number of genes involved in different processes such as cell-cycle regulation, hormone-induction and house-keeping.

Cellular Location

Nucleus. Nucleus, PML body. Note=Localizes to the nuclear periphery and in nuclear dots when sumoylated. Some localization in PML nuclear bodies

Tissue Location Ubiquitously expressed.

SP3 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SP3 Antibody (Center) - Images



SP3 Antibody (Center) (Cat. #AP14413c) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the SP3 antibody detected the SP3 protein (arrow).

SP3 Antibody (Center) - Background

This gene belongs to a family of Sp1 related genes that encode transcription factors that regulate transcription by binding to consensus GC- and GT-box regulatory elements in target genes. This protein contains a zinc finger DNA-binding domain and several transactivation domains, and has been reported to function as a bifunctional transcription factor that either stimulates or represses the transcription of numerous genes. Transcript variants encoding different isoforms have been described for this gene, and



one has been reported to initiate translation from a non-AUG (AUA) start codon. Additional isoforms, resulting from the use of alternate downstream translation initiation sites, have also been noted. A related pseudogene has been identified on chromosome 13.

SP3 Antibody (Center) - References

Yamaguchi, K., et al. Biochem. J. 430(1):107-117(2010) Jutooru, I., et al. J. Biol. Chem. 285(33):25332-25344(2010) Markovics, J.A., et al. J. Biol. Chem. 285(32):24695-24706(2010) Eckerstorfer, P., et al. Mol. Immunol. 47 (11-12), 2094-2102 (2010) : Moran, K.M., et al. Gene 341, 235-247 (2004) :