

Product Name: KD-Validated Sp1 Transcription Factor Mouse Monoclonal Antibody
Catalog #: KVA00608

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1 kappa
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 80.7kDa

Antigen Information

Gene Name	SP1
Alternative Names	SP1; Sp1 Transcription Factor; Transcription Factor Sp1; Specificity Protein 1; TSFP1
Gene ID	6667.0
SwissProt ID	P08047
Immunogen	Recombinant protein of human SP1

Background

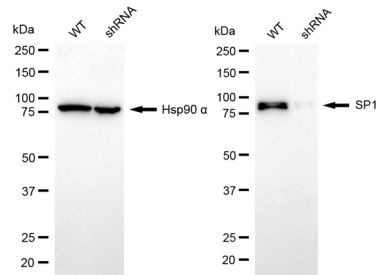
The protein encoded by this gene is a zinc finger transcription factor that binds to GC-rich motifs of many promoters. The encoded protein is involved in many cellular processes, including cell differentiation, cell growth, apoptosis, immune responses, response to DNA damage, and chromatin remodeling. Post-translational modifications such as phosphorylation, acetylation, glycosylation, and proteolytic processing significantly affect the activity of this protein, which can be an activator or a repressor.

Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2014]

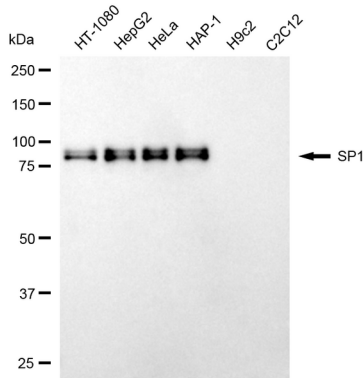
Research Area

Epigenetics and Nuclear Signaling, Stem Cells, Metabolism

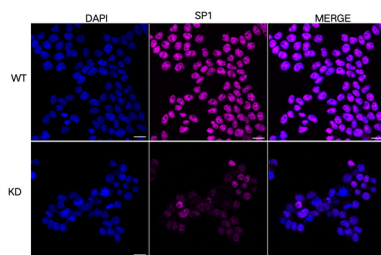
Image Data



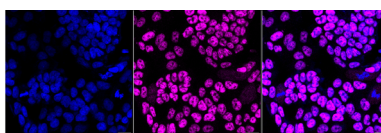
Western blotting analysis using SP1 antibody (KVA00608). SP1 expression in wild-type (WT) and SP1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with SP1 antibody (KVA00608, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



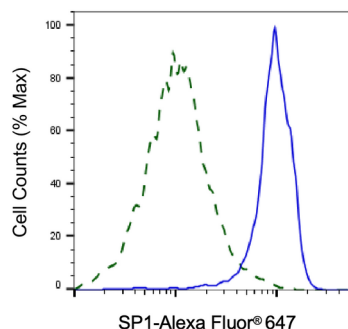
Western blotting analysis using SP1 antibody (KVA00608). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with SP1 antibody (KVA00608, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



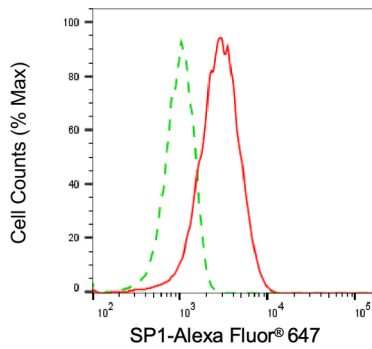
Immunocytochemical staining of HeLa cells using SP1 antibody (KVA00608, 1:1,000), Top panel: wild-type (WT); Bottom panel: SP1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; SP1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HAP-1 cells with SP1 antibody (KVA00608, 1:1,000). Nuclei were stained blue with DAPI; SP1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of SP1 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with SP1 antibody (KVA00608, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of SP1 expression in HAP-1 cells using SP1 antibody (KVA00608, 1:2,000). Green, isotype control; red, SP1.