

## Product datasheet for **AP06584PU-S**

### SP1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200. <b>Immunofluorescence:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 421-470 of Human Sp1.
Specificity:	This antibody detects endogenous levels of SP1 protein. (region surrounding Gly447)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 90 kDa
Gene Name:	Sp1 transcription factor
Database Link:	<a href="#">Entrez Gene 20683 Mouse</a> <a href="#">Entrez Gene 24790 Rat</a> <a href="#">Entrez Gene 6667 Human P08047</a>



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**Background:**

Sp1 is a sequence-specific transcription factor that recognizes GGGGCGGGGC and closely related sequences, which are often referred to as GC boxes. Sp1 was initially identified as a HeLa cell-derived factor that selectively activates in vitro transcription from the SV40 promoter and binds to the multiple GC boxes in the 21 bp repeated elements in SV40. The sequence specificity of DNA binding is conferred by Zn (II) fingers, whereas a different region of Sp1 appears to regulate the affinity of DNA binding. Sp1 belongs to a subgroup of transcription factors that are phosphorylated upon binding to promoter sequences. Evidence suggests that the early growth response gene, Erg-1 (also known as Zif268 or NGF1-A), may downregulate certain mammalian gene promoters by competing with Sp1 for binding to an overlapping binding motif. The gene encoding human Sp1 maps to chromosome 12q13.1.

**Synonyms:**

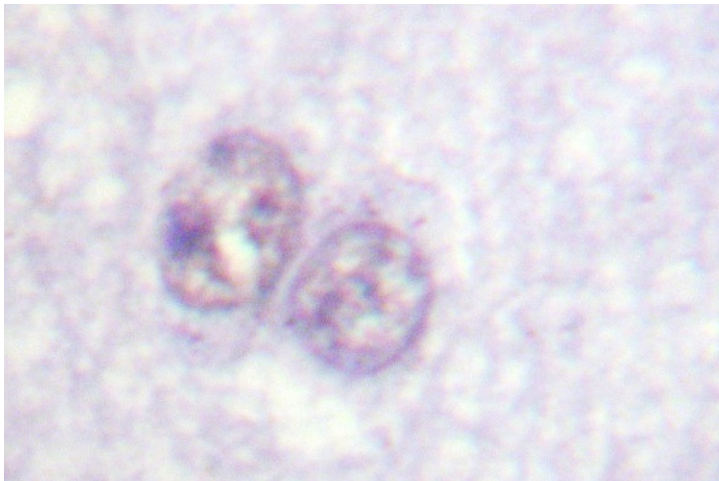
Transcription factor Sp1

**Protein Families:**

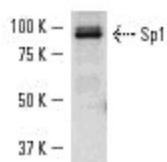
Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors

**Protein Pathways:**

Huntington's disease, TGF-beta signaling pathway

**Product images:**

Western blot (WB) analysis of SP1 antibody in K-562 (A) and A-431 (B) whole cell lysates.



Immunohistochemistry (IHC) analyses of SP1 antibody in paraffin-embedded human brain tissue.