Recombinant SP1 protein

Catalog No: 81181
Lot No: 18318001
Expressed In: Baculovirus
Quantity: 20 µg
Concentration: 0.15 µg/µl
Source: Human

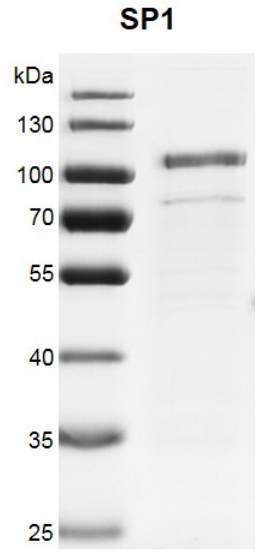
Buffer Contents: Recombinant SP1 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

Background: SP1 (Specificity Protein 1), also called as Sp1 Transcription Factor or TFSP1, is a zinc finger transcription factor that binds to GC-rich motifs of many promoters. It can bind with high affinity to GC-rich motifs and regulate the expression of a large number of genes involved in a variety of processes such as cell growth, apoptosis, differentiation and immune responses. Highly regulated by post-translational modifications (phosphorylations, sumoylation, proteolytic cleavage, glycosylation and acetylation). It may also have a role in modulating the cellular response to DNA damage and chromatin remodeling. SP1 plays an essential role in the regulation of FE65 gene expression. In complex with ATF7IP, SP1 maintains telomerase activity in cancer cells by inducing TERT and TERC gene expression. It positively regulates the transcription of the core clock component ARNTL / BMAL1. Also it can play a role in the recruitment of SMARCA4 / BRG1 on the c-FOS promoter.

Protein Details: Recombinant human SP1 protein was expressed in a baculovirus expression system as the full length protein (accession number NP_612482.2) with an N-terminal FLAG tag. The molecular weight of the protein is 82.3 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



Recombinant SP1 protein gel
Recombinant SP1 protein was run on a 10% SDS-PAGE gel and stained with Coomassie blue.
MW: 82.3 kDa
Purity: >88%