

SSBP1 Polyclonal Antibody

Catalog # AP72609

Product Information

Application WB, IHC-P, IF Primary Accession 004837

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW17260

Additional Information

Gene ID 6742

Other Names SSBP1; SSBP; Single-stranded DNA-binding protein; mitochondrial; Mt-SSB;

MtSSB; PWP1-interacting protein 17

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name SSBP1

Synonyms SSBP

Function Binds preferentially and cooperatively to pyrimidine rich single-stranded

DNA (ss-DNA) (PubMed:<u>21953457</u>, PubMed:<u>23290262</u>, PubMed:<u>31550240</u>). In vitro, required to maintain the copy number of mitochondrial DNA (mtDNA) and plays a crucial role during mtDNA replication by stimulating the activity of

(PubMed: 12975372, PubMed: 15167897, PubMed: 21953457,

PubMed:<u>26446790</u>, PubMed:<u>31550240</u>). Promotes the activity of the gamma complex polymerase POLG, largely by organizing the template DNA and eliminating secondary structures to favor ss-DNA conformations that facilitate POLG activity (PubMed:<u>21953457</u>, PubMed:<u>26446790</u>, PubMed:<u>31550240</u>). In addition it is able to promote the 5'-3' unwinding activity of the mtDNA helicase TWNK (PubMed:<u>12975372</u>). May also function in mtDNA repair

(PubMed: 23290262).

Cellular Location Mitochondrion Mitochondrion matrix, mitochondrion nucleoid

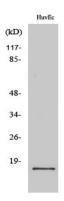
Tissue Location Expressed in retinal ganglion cells, photoreceptors, pigmented epithelium and

fibroblasts (at protein level).

Background

This protein binds preferentially and cooperatively to ss-DNA. Probably involved in mitochondrial DNA replication. Associates with mitochondrial DNA.

Images



Western Blot analysis of various cells using SSBP1 Polyclonal Antibody

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