

SSBP1 Polyclonal Antibody

Catalog # AP72609

Product Information

Application	WB, IHC-P, IF
Primary Accession	Q04837
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17260

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: 21953457 , PubMed: 23290262 , PubMed: 31550240). 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 the replisome components POLG and TWNK at the replication fork (PubMed: 12975372 , PubMed: 15167897 , PubMed: 21953457 , PubMed: 26446790 , PubMed: 31550240). 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: 21953457 , PubMed: 26446790 , PubMed: 31550240). In addition it is able to promote the 5'-3' unwinding activity of the mtDNA helicase TWNK (PubMed: 12975372). 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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