

SSBP1 Polyclonal Antibody
Catalog # AP72609**Specification**

SSBP1 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	Q04837
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

SSBP1 Polyclonal Antibody - 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.**Format**

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

Storage Conditions

-20°C

SSBP1 Polyclonal Antibody - 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

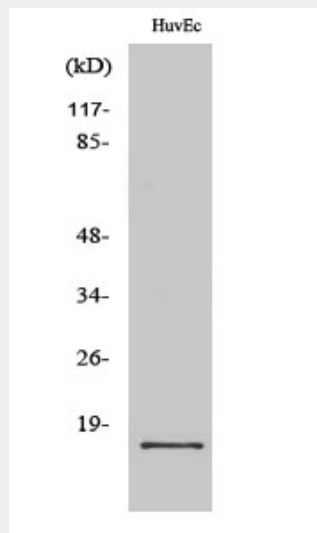
Expressed in retinal ganglion cells, photoreceptors, pigmented epithelium and fibroblasts (at protein level).

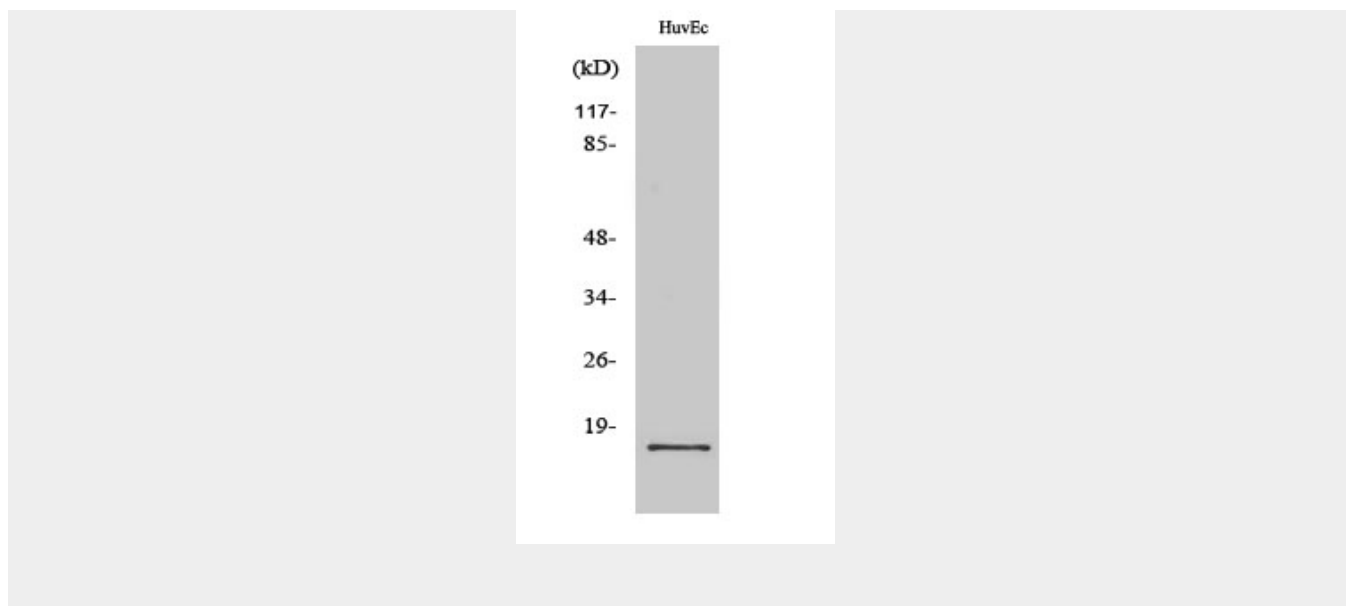
SSBP1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SSBP1 Polyclonal Antibody - Images





SSBP1 Polyclonal Antibody - Background

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