

C4orf27 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59462**Specification**

C4orf27 Polyclonal Antibody - Product Information

Application	IHC-P
Primary Accession	O9NWX4
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39436

C4orf27 Polyclonal Antibody - Additional Information**Gene ID** 54969**Other Names**Histone PARYlation factor 1, HPF1 {ECO:0000303|PubMed:27067600,
ECO:0000312|HGNC:HGNC:26051}**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

C4orf27 Polyclonal Antibody - Protein Information**Name** HPF1 {ECO:0000303|PubMed:27067600, ECO:0000312|HGNC:HGNC:26051}**Function**

Cofactor for serine ADP-ribosylation that confers serine specificity on PARP1 and PARP2 and plays a key role in DNA damage response (PubMed:<a

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[34795260](http://www.uniprot.org/citations/34795260), PubMed: [34108479](http://www.uniprot.org/citations/34108479)). Initiates the repair of double-strand DNA breaks: recruited to DNA damage sites by PARP1 and PARP2 and switches the amino acid specificity of PARP1 and PARP2 from aspartate or glutamate to serine residues, licensing serine ADP-ribosylation of target proteins (PubMed: [28190768](http://www.uniprot.org/citations/28190768), PubMed: [29480802](http://www.uniprot.org/citations/29480802), PubMed: [29954836](http://www.uniprot.org/citations/29954836), PubMed: [32028527](http://www.uniprot.org/citations/32028527), PubMed: [32939087](http://www.uniprot.org/citations/32939087), PubMed: [34486521](http://www.uniprot.org/citations/34486521), PubMed: [34874266](http://www.uniprot.org/citations/34874266), PubMed: [34625544](http://www.uniprot.org/citations/34625544), PubMed: [33589610](http://www.uniprot.org/citations/33589610), PubMed: [34732825](http://www.uniprot.org/citations/34732825), PubMed: [33683197](http://www.uniprot.org/citations/33683197), PubMed: [34795260](http://www.uniprot.org/citations/34795260)). Serine ADP-ribosylation of target proteins, such as histones, promotes decompaction of chromatin and the recruitment of repair factors leading to the reparation of DNA strand breaks (PubMed: [27067600](http://www.uniprot.org/citations/27067600), PubMed: [28190768](http://www.uniprot.org/citations/28190768), PubMed: [32939087](http://www.uniprot.org/citations/32939087), PubMed: [33589610](http://www.uniprot.org/citations/33589610)). Serine ADP-ribosylation of proteins constitutes the primary form of ADP-ribosylation of proteins in response to DNA damage (PubMed: [29480802](http://www.uniprot.org/citations/29480802)). HPF1 acts by completing the active site of PARP1 and PARP2: forms a composite active site composed of residues from HPF1 and PARP1 or PARP2 (PubMed: [32028527](http://www.uniprot.org/citations/32028527), PubMed: [33589610](http://www.uniprot.org/citations/33589610)). While HPF1 promotes the initiation of serine ADP-ribosylation, it restricts the polymerase activity of PARP1 and PARP2 in order to limit the length of poly-ADP-ribose chains (PubMed: [34732825](http://www.uniprot.org/citations/34732825), PubMed: [33683197](http://www.uniprot.org/citations/33683197), PubMed: [34795260](http://www.uniprot.org/citations/34795260)). HPF1 also promotes tyrosine ADP-ribosylation, probably by conferring tyrosine specificity on PARP1 (PubMed: [29954836](http://www.uniprot.org/citations/29954836), PubMed: [30257210](http://www.uniprot.org/citations/30257210)).

Cellular Location

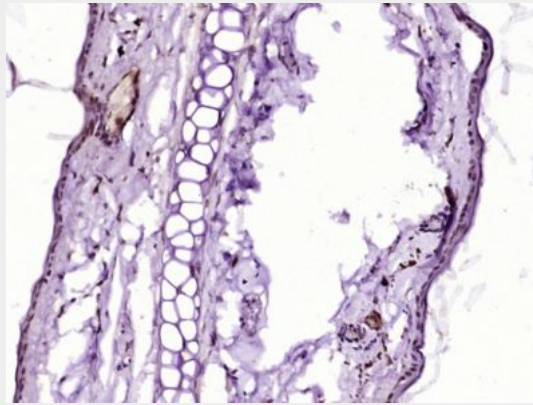
Chromosome. Nucleus Note=Localizes to DNA damage sites; chromatin localization is dependent on PARP1 and PARP2.

C4orf27 Polyclonal Antibody - Protocols

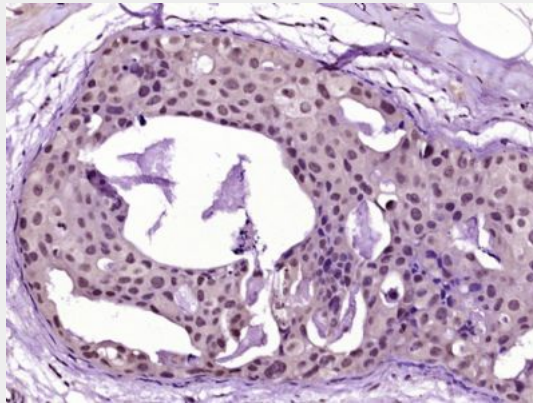
Provided below are standard protocols that you may find useful for product applications.

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

C4orf27 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse skin); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (C4orf27) Polyclonal Antibody, Unconjugated (bs-9994R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (C4orf27) Polyclonal Antibody, Unconjugated (bs-9994R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.