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APLF (phospho Ser116) Polyclonal Antibody
Catalog # AP68010

Specification

APLF (phospho Ser116) Polyclonal Antibody - Product Information

Application	**IHC-P**
Primary Accession	Q8IW19
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**

APLF (phospho Ser116) Polyclonal Antibody - Additional Information

Gene ID 200558

Other Names
APLF; C2orf13; PALF; XIP1; Aprataxin and PNK-like factor; Apurinic-apyrimidinic endonuclease APLF; PNK and APTX-like FHA domain-containing protein; XRCC1-interacting protein 1

Dilution
IHC-P~~N/A

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

Storage Conditions
-20℃

APLF (phospho Ser116) Polyclonal Antibody - Protein Information

Name APLF {ECO:0000303|PubMed:17353262, ECO:0000312|HGNC:HGNC:28724}

Function
Histone chaperone involved in single-strand and double-strand DNA break repair (PubMed:17353262, PubMed:17396150, PubMed:21211721, PubMed:21211722, PubMed:29905837, PubMed:30104678). Recruited to sites of DNA damage through interaction with branched poly-ADP-ribose chains, a polymeric post-translational modification synthesized transiently at sites of chromosomal damage to accelerate DNA strand break repair reactions (PubMed:17353262, PubMed:17396150, PubMed:21211721, PubMed:30104678). Following recruitment to DNA damage sites, acts as a histone chaperone that mediates histone eviction

during DNA repair and promotes recruitment of histone variant MACROH2A1 (PubMed:21211722, PubMed:29905837, PubMed:30104678). Also has a nuclease activity: displays apurinic-apyrimidinic (AP) endonuclease and 3'-5' exonuclease activities in vitro (PubMed:17353262, PubMed:17396150). Also able to introduce nicks at hydroxyuracil and other types of pyrimidine base damage (PubMed:17353262, PubMed:17396150). Together with PARP3, promotes the retention of the LIG4-XRCC4 complex on chromatin and accelerate DNA ligation during non-homologous end-joining (NHEJ) (PubMed:21211721, PubMed:23689425). Also acts as a negative regulator of cell pluripotency by promoting histone exchange (By similarity). Required for the embryo implantation during the epithelial to mesenchymal transition in females (By similarity).

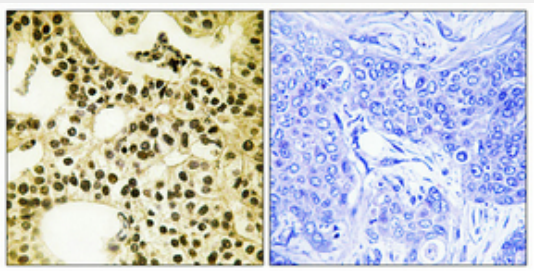
Cellular Location
Nucleus. Chromosome. Cytoplasm, cytosol. Note=Localizes to DNA damage sites (PubMed:18172500, PubMed:18474613, PubMed:21211721, PubMed:21211722, PubMed:23689425). Accumulates at single-strand breaks and double-strand breaks via the PBZ-type zinc fingers (PubMed:18172500)

APLF (phospho Ser116) 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 Cytomety
- Cell Culture

APLF (phospho Ser116) Polyclonal Antibody - Images



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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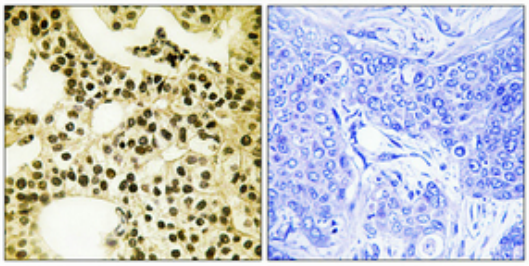

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APLF (phospho Ser116) Polyclonal Antibody - Background

Nuclease involved in single-strand and double-strand DNA break repair (PubMed:17353262, PubMed:17396150). Recruited to sites of DNA damage through interaction with poly(ADP-ribose), a polymeric post-translational modification synthesized transiently at sites of chromosomal damage to accelerate DNA strand break repair reactions (PubMed:17353262, PubMed:17396150, PubMed:21211721). Displays apurinic-apyrimidinic (AP) endonuclease and 3'-5' exonuclease activities in vitro. Also able to introduce nicks at hydroxyuracil and other types of pyrimidine base damage (PubMed:17353262, PubMed:17396150). Together with PARP3, promotes the retention of the LIG4-XRCC4 complex on chromatin and accelerate DNA ligation during non-homologous end-joining (NHEJ) (PubMed:21211721).