SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-APLF antibody

SL12489R

Product Name:	APLF
Chinese Name:	DNA修复酶相互作用蛋白抗体
Alias:	2010301N04Rik; AI452191; Aplf; APLF_HUMAN; Aprataxin and pnk-like factor; Apurinic-apyrimidinic endonuclease APLF; C2orf13; PNK and APTX like FHA protein; PNK and APTX-like FHA domain-containing protein; RGD1565557; XIP1; XRCC1 interacting protein 1; XRCC1-interacting protein 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500(Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APLF:421-511/511
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20癈. 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 癈.
PubMed:	PubMed
Product Detail:	APLF is a 511 amino acid protein that contains one FHA doman and two C2H2type zinc fingers. Localized to both the nucleus and the cytoplasm, APLF interacts with XRCC1, XRCC4 and Ku-86 and, via these interactions, is involved in single-strand and

	double-strand DNA break repair. APLF is subject to post-translational phosphorylation in response to DNA breaks. The gene encoding APLF maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, is caused by mutations in the ALMS1 gene, which maps to chromosome 2. **Function:** Nuclease involved in single-strand and double-strand DNA break repair. 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. 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. **Subunit:** Interacts with LIG4, PARP1, XRCC1, XRCC4 and XRCC5. **Subcellular Location:** Nucleus. Cytoplasm; cytosol. Localizes to DNA damage sites. Accumulates at single-strand breaks and double-strand breaks via the PBZ-type zinc fingers. **Post-translational modifications:** Poly-ADP-ribosylated. In addition to binding non covalently poly(ADP-ribose) via its PBZ-type zinc fingers, the protein is also covalently poly-ADP-ribosylated by PARP1. Phosphorylated in an ATM-dependent manner upon double-strand DNA break. **Similarity:** Belongs to the APLF family. Contains 1 FHA-like domain. Contains 2 PBZ-type zinc fingers. **SWISS:** Q8IW19 **Gene ID:** 200558 **Database links:** Entrez Gene: 200558Human Entrez Gene: 72103Mouse Omim: 611035Human

	SwissProt: Q8IW19Human SwissProt: Q9D842Mouse Unigene: 720369Human Unigene: 31770Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.