


Anti-APLF antibody ab105446

2 Images

Overview

Product name	Anti-APLF antibody
Description	Rabbit polyclonal to APLF
Host species	Rabbit
Specificity	From Mar 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help.
Tested applications	Suitable for: ICC/IF, WB
Species reactivity	Reacts with: Human Predicted to work with: Horse, Macaque monkey, Orangutan 
Immunogen	Synthetic peptide corresponding to Human APLF aa 100-200 conjugated to keyhole limpet haemocyanin. (Peptide available as ab119169)
Positive control	This antibody gave a positive signal in Human Brain tissue lysate.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

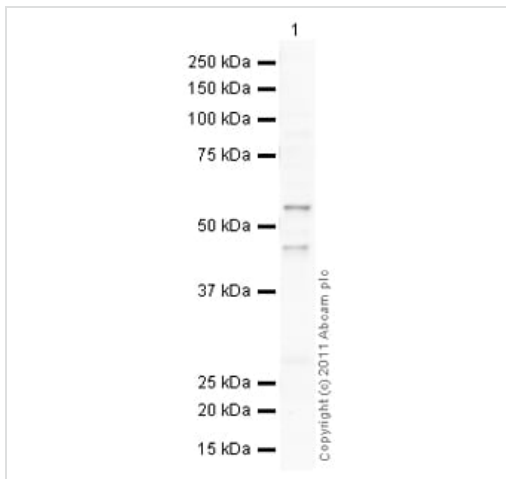
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab105446 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 57 kDa (predicted molecular weight: 57 kDa).

Target

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.
Sequence similarities	Belongs to the APLF family. Contains 1 FHA-like domain. Contains 2 PBZ-type zinc fingers.
Domain	The PBZ-type zinc fingers (also named CYR) mediate non-covalent poly(ADP-ribose)-binding. Poly(ADP-ribose)-binding is dependent on the presence of zinc and promotes its recruitment to DNA damage sites. The FHA-like domain mediates interaction with XRCC1 and XRCC4.
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.
Cellular localization	Nucleus. Cytoplasm > cytosol. Localizes to DNA damage sites. Accumulates at single-strand breaks and double-strand breaks via the PBZ-type zinc fingers.

Images



Western blot - Anti-APLF antibody (ab105446)

Anti-APLF antibody (ab105446) at 1 µg/ml + Human brain tissue lysate - total protein ([ab29466](#)) at 10 µg

Secondary

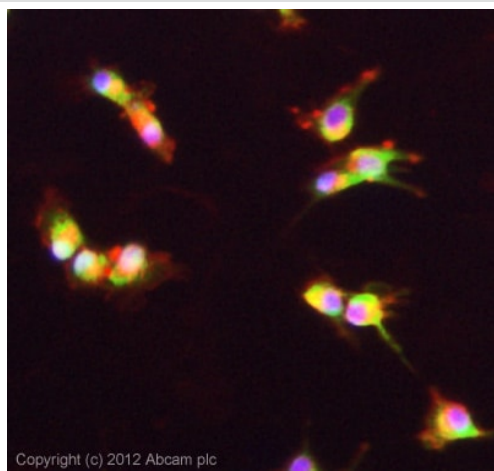
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Predicted band size: 57 kDa

Observed band size: 57 kDa

Additional bands at: 46 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 4 minutes



Immunocytochemistry/ Immunofluorescence - Anti-APLF antibody (ab105446)

ICC/IF image of ab105446 stained U87MG cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab105446, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96899](#), DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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