abcam

Product datasheet

Anti-XLF antibody [EPR15882-36] - BSA and Azide free ab232587

KO VALIDATED Recombinant RabMAb

7 Images

Overview

Product name	Anti-XLF antibody [EPR15882-36] - BSA and Azide free
Description	Rabbit monoclonal [EPR15882-36] to XLF - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild type HAP1 whole cell lysate; HeLa whole cell lysate.
General notes	ab232587 is the carrier-free version of **ab189917**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15882-36
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab232587 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
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 39 kDa (predicted molecular weight: 33 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

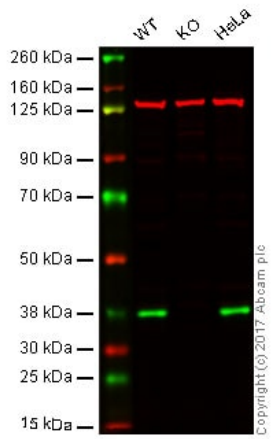
Function	DNA repair protein involved in DNA nonhomologous end joining (NHEJ) required for double-strand break (DSB) repair and V(D)J recombination. May serve as a bridge between XRCC4 and the other NHEJ factors located at DNA ends, or may participate in reconfiguration of the end bound NHEJ factors to allow XRCC4 access to the DNA termini. It may act in concert with XRCC6/XRCC5 (Ku) to stimulate XRCC4-mediated joining of blunt ends and several types of mismatched ends that are noncomplementary or partially complementary.
Tissue specificity	Ubiquitously expressed.
Involvement in disease	Defects in NHEJ1 are the cause of severe combined immunodeficiency due to NHEJ1 deficiency (NHEJ1-SCID) [MIM:611291]; also known as autosomal recessive T cell-negative, B cell-negative, NK cell-positive, severe combined immunodeficiency with microcephaly, growth retardation and sensitivity to ionizing radiation or NHEJ1 syndrome. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia and low or absent antibody levels. Patients

with SCID present in infancy with recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development. NHEJ1-SCID is characterized by a profound T- and B-lymphocytopenia associated with increased cellular sensitivity to ionizing radiation, microcephaly and growth retardation. Some patients may manifest SCID with sensitivity to ionizing radiation without microcephaly and mild growth retardation, probably due to hypomorphic NHEJ1 mutations.
Note=A chromosomal aberration involving NHEJ1 is found in a patient with polymicrogyria. Translocation t(2;7)(q35;p22).

Sequence similarities Belongs to the XLF family.

Cellular localization Nucleus.

Images



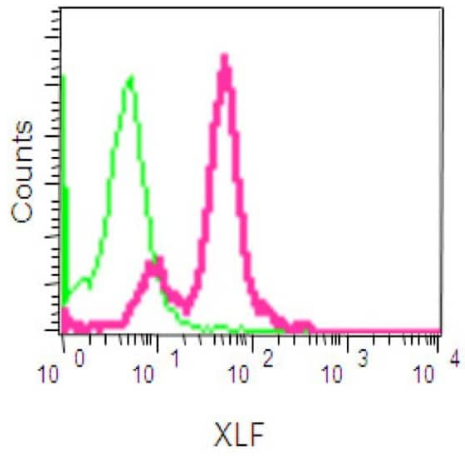
Western blot - Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)
Lane 2: XLF knockout HAP1 whole cell lysate (20 µg)
Lane 3: HeLa whole cell lysate (20 µg)

Lanes 1 - 3: Merged signal (red and green). Green - **ab189917** observed at 38 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab189917 was shown to specifically react with XLF in wild type cells as signal was lost in XLF knockout cells. Wild-type and XLF knockout samples were subjected to SDS-PAGE. **ab189917** and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

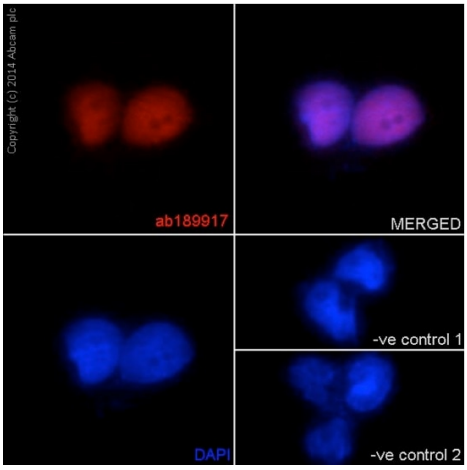
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab189917**).



Flow Cytometry (Intracellular) - Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Intracellular flow cytometrical analysis of Ramos cells labeling XLF with **ab189917** at 1/60 compared to a negative control cell. FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

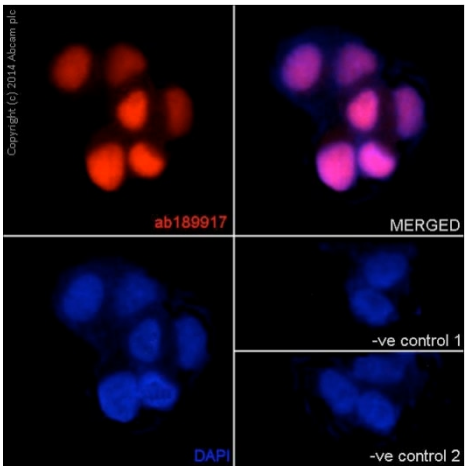
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab189917**).



Immunocytochemistry/ Immunofluorescence - Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Immunofluorescent analysis of paraformaldehyde-fixed NCCIT cells labeling XLF with **ab189917** at 1/250, Goat anti rabbit IgG (Alexa Fluor® 555) at 1/200 and DAPI staining (blue).

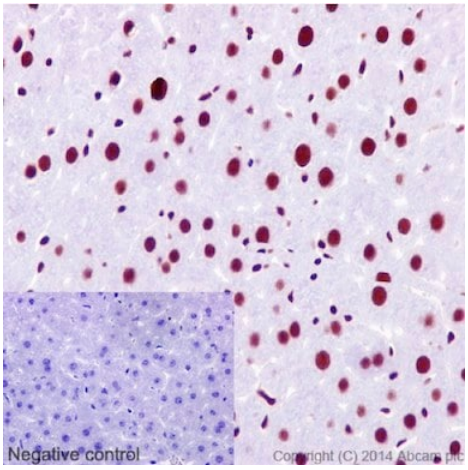
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab189917**).



Immunocytochemistry/ Immunofluorescence - Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Immunofluorescent analysis of paraformaldehyde-fixed HepG2 cells labeling XLF with **ab189917** at 1/250, Goat anti rabbit IgG (Alexa Fluor® 555) at 1/200 and DAPI staining (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab189917**).

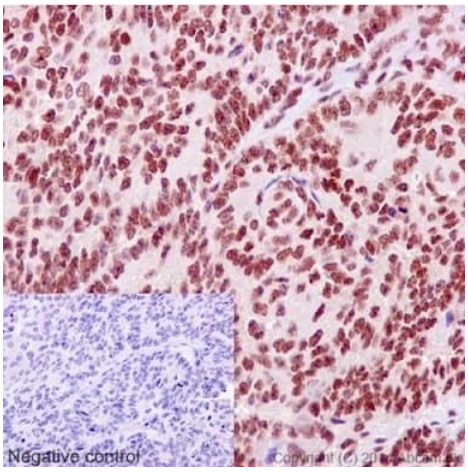


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling XLF with **ab189917** at 1/250 with prediluted ImmunoHistoprobe(Ready to use) HRP Polymer for Rabbit IgG as secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab189917**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

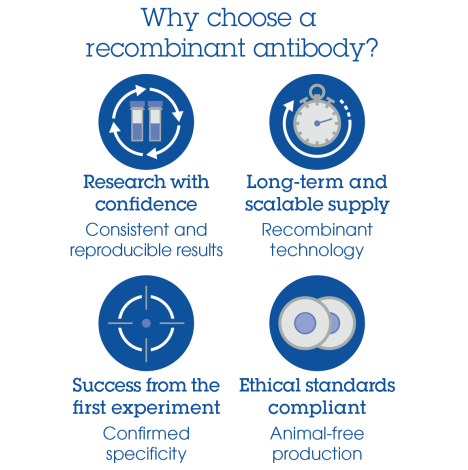


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Immunohistochemical analysis of paraffin-embedded Human endometrial adenocarcinoma tissue labeling XLF with **ab189917** at 1/250 with prediluted ImmunoHistoprobe(Ready to use) HRP Polymer for Rabbit IgG as secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab189917**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Anti-XLF antibody [EPR15882-36] - BSA and Azide free (ab232587)

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors