abcam

Product datasheet

Anti-XLF antibody [EPR15882-42] ab189520

KO VALIDATED Recombinant RabMAb

1 References 4 Images

Overview

Product name	Anti-XLF antibody [EPR15882-42]
Description	Rabbit monoclonal [EPR15882-42] to XLF
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	NCCIT, 293, HepG2 and Jurkat cell lysates; A431 cells.
General notes	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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15882-42
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab189520 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
WB		1/10000 - 1/50000. Detects a band of approximately 37 kDa (predicted molecular weight: 33 kDa).
ICC/IF		1/250 - 1/500.

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.

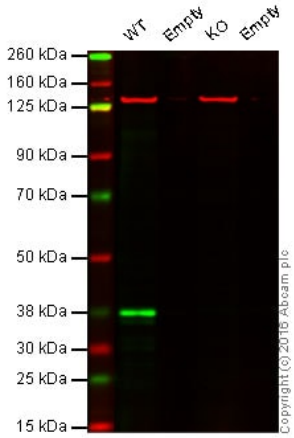
Tissue specificity Ubiquitously expressed.

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

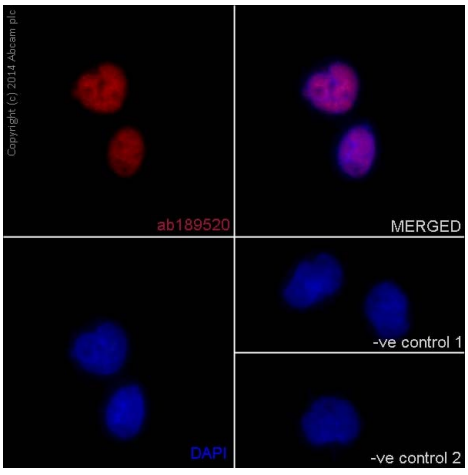


Western blot - Anti-XLF antibody [EPR15882-42] (ab189520)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: XLF knockout HAP1 cell lysate (20 µg)

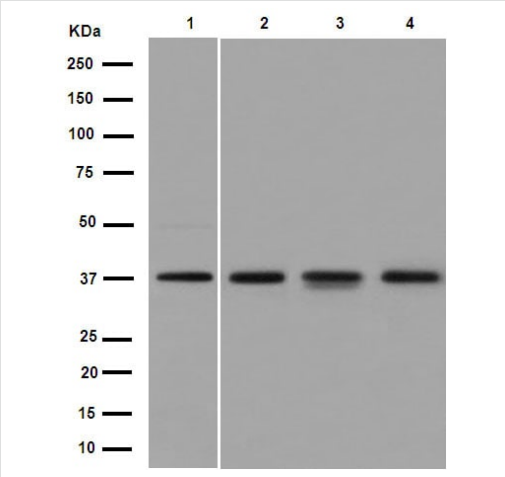
Lanes 1 - 2: Merged signal (red and green). Green – ab189520 observed at 38 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab189520 was shown to specifically react with XLF when XLF knockout samples were used. Wild-type and XLF knockout samples were subjected to SDS-PAGE. ab189520 and **ab18058** (loading control to Vinculin) were both diluted at 1/10 000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-XLF antibody [EPR15882-42] (ab189520)

Immunofluorescent analysis of 4% paraformaldehyde-fixed A431 cells labeling XLF with ab189520 at 1/250 dilution followed by Goat anti rabbit IgG (Alexa Fluor® 555) secondary antibody at 1/200 dilution. Counter stained with DAPI.



Western blot - Anti-XLF antibody [EPR15882-42] (ab189520)

All lanes : Anti-XLF antibody [EPR15882-42] (ab189520) at 1/20000 dilution

Lane 1 : NCCIT cell lysate
Lane 2 : 293 cell lysate
Lane 3 : HepG2 cell lysate
Lane 4 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat anti-rabbit IgG, (H+L), peroxidase conjugate at 1/1000 dilution

Predicted band size: 33 kDa
Observed band size: 37 kDa

Anti-XLF antibody [EPR15882-42] (ab189520)

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