

Product datasheet

Anti-Ikaros antibody - N-terminal ab180713

★★★★★ [1 Abreviews](#) [5 Images](#)

Overview

Product name	Anti-Ikaros antibody - N-terminal
Description	Rabbit polyclonal to Ikaros - N-terminal
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment corresponding to Human Ikaros aa 1-270 (N terminal). Sequence:

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MDADEGQDMS QVSGKESPPV SDTPDEGDEP
MPIPEDLSTT SGGQQSSKSD RVVASNVKVE
TQSDDENGRA CEMNGEECAE DLRMLDASGE
KMNGSHRDQG SSALSGVGGI RLPNGKCLKCD ICGICIGPN
VLMVHKRSHT GERPFQCNQC GASFTQKGNL
LRHIKLHSGE KPFKCHLCNY ACRRRDALTG
HLRTHSVGKP HKCGYCGRSY QQRSSLEEHLK
ERCHNYLESM GLPGTLYPVI KEETNHSEMA
EDLCKIGSER SLVLDRLASN
```

Database link: [Q13422](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

Positive control BT474 cell line extracts.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer

pH: 7.30
Preservative: 0.02% Sodium azide
Constituents: 50% Glycerol, 49% PBS

Purity

Immunogen affinity purified

Clonality

Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab180713 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 at an assay dependent concentration.
IHC-P		1/50 - 1/200. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/500 - 1/2000. Predicted molecular weight: 57 kDa.

Target

Function

Transcription regulator of hematopoietic cell differentiation (PubMed:17934067). Binds gamma-satellite DNA (PubMed:17135265, PubMed:19141594). Plays a role in the development of lymphocytes, B- and T-cells. Binds and activates the enhancer (delta-A element) of the CD3-delta gene. Repressor of the TDT (fukzterminal deoxynucleotidyltransferase) gene during thymocyte differentiation. Regulates transcription through association with both HDAC-dependent and HDAC-independent complexes. Targets the 2 chromatin-remodeling complexes, NuRD and BAF (SWI/SNF), in a single complex (PYR complex), to the beta-globin locus in adult erythrocytes. Increases normal apoptosis in adult erythroid cells. Confers early temporal competence to retinal progenitor cells (RPCs) (By similarity). Function is isoform-specific and is modulated by dominant-negative inactive isoforms (PubMed:17135265, PubMed:17934067).

Tissue specificity

Abundantly expressed in thymus, spleen and peripheral blood Leukocytes and lymph nodes. Lower expression in bone marrow and small intestine.

Involvement in disease

Defects in IKZF1 are frequent occurrences (28.6%) in acute lymphoblastic leukemia (ALL). Such alterations or deletions lead to poor prognosis for ALL. Chromosomal aberrations involving IKZF1 are a cause of B-cell non-Hodgkin lymphomas (B-cell NHL). Translocation t(3;7)(q27;p12), with BCL6.

Sequence similarities

Belongs to the Ikaros C2H2-type zinc-finger protein family. Contains 6 C2H2-type zinc fingers.

Domain

The N-terminal zinc-fingers 2 and 3 are required for DNA binding as well as for targeting IKZF1 to pericentromeric heterochromatin. The C-terminal zinc-finger domain is required for dimerization.

Post-translational modifications

Phosphorylation controls cell-cycle progression from late G(1) stage to S stage. Hyperphosphorylated during G2/M phase. Dephosphorylated state during late G(1) phase. Phosphorylation on Thr-140 is required for DNA and pericentromeric location during mitosis. CK2 is the main kinase, in vitro. GSK3 and CDK may also contribute to phosphorylation of the C-terminal serine and threonine residues. Phosphorylation on these C-terminal residues reduces the DNA-binding ability. Phosphorylation/dephosphorylation events on Ser-13 and Ser-295 regulate TDT expression during thymocyte differentiation. Dephosphorylation by protein phosphatase 1 regulates stability and pericentromeric heterochromatin location. Phosphorylated in both lymphoid and non-lymphoid tissues (By similarity). Phosphorylation at Ser-361 and Ser-364 downstream of SYK induces nuclear translocation. Sumoylated. Simultaneous sumoylation on the 2 sites results in a loss of both HDAC-dependent and HDAC-independent repression. Has no effect on pericentromeric heterochromatin location. Desumoylated by SENP1. Polyubiquitinated.

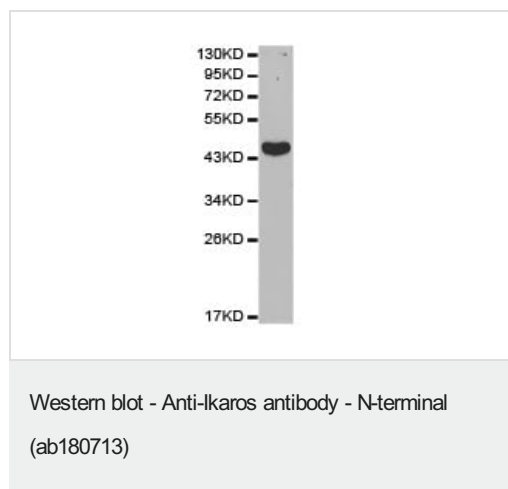
Cellular localization

Cytoplasm; Nucleus. In resting lymphocytes, distributed diffusely throughout the nucleus. Localizes to pericentromeric heterochromatin in proliferating cells. This localization requires DNA binding which is regulated by phosphorylation / dephosphorylation events and Nucleus. In resting lymphocytes, distributed diffusely throughout the nucleus. Localizes to pericentromeric heterochromatin in proliferating cells. This localization requires DNA binding which is regulated by phosphorylation / dephosphorylation events (By similarity).

Form

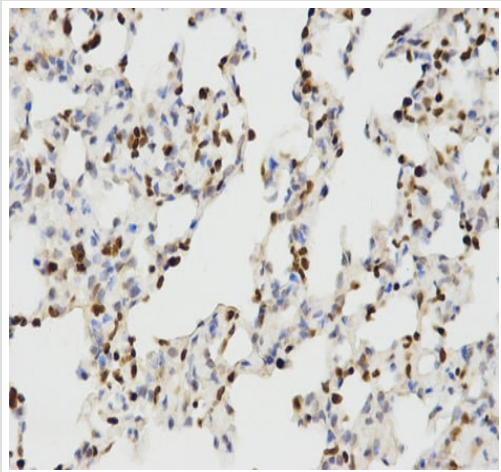
There are 7 isoforms produced by alternative splicing.

Images



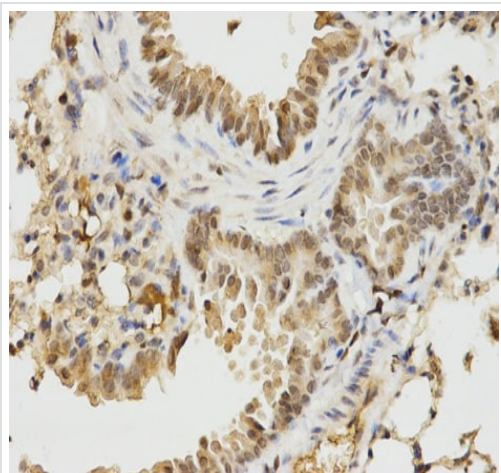
Anti-Ikaros antibody - N-terminal (ab180713) at 1/500 dilution + BT474 cell line extracts

Predicted band size: 57 kDa



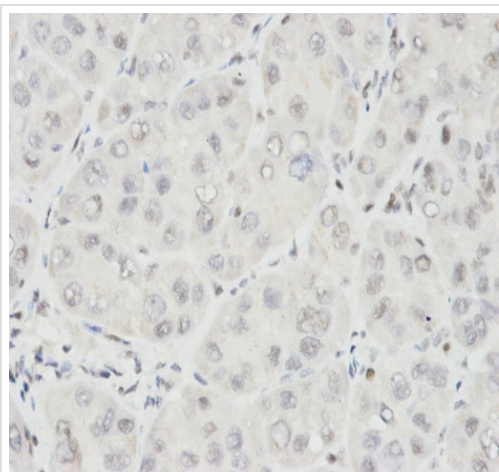
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat lung tissue labelling Ikaros with ab180713 at 1/100. Magnification: 400x.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ikaros antibody - N-terminal (ab180713)



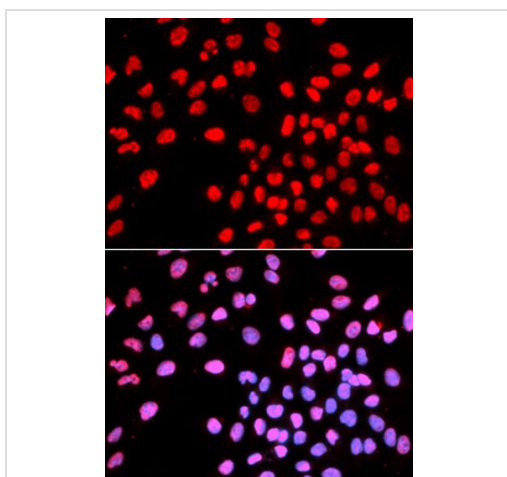
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse lung tissue labelling Ikaros with ab180713 at 1/100. Magnification: 400x.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ikaros antibody - N-terminal (ab180713)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver cancer tissue labelling Ikaros with ab180713 at 1/100. Magnification: 400x.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ikaros antibody - N-terminal (ab180713)



Immunocytochemistry/Immunofluorescence analysis of U2OS cells using ab180713. Blue DAPI for nuclear staining.

Immunocytochemistry/ Immunofluorescence - Anti-Ikaros antibody - N-terminal (ab180713)

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

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