

Product datasheet

Anti-Ikaros antibody [SP108] ab105228

Recombinant RabMAb

4 Images

Overview

Product name	Anti-Ikaros antibody [SP108]
Description	Rabbit monoclonal [SP108] to Ikaros
Host species	Rabbit
Tested applications	Suitable for: IHC-P, Flow Cyt
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat ▲
Immunogen	Synthetic peptide within Human Ikaros aa 1-100 (N terminal). The exact sequence is proprietary. Database link: Q13422
Positive control	IHC-P: Human tonsil tissue. Flow Cyt: Molt-4
General notes	This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.

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](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work

with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP108
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab105228** 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
IHC-P		1/100. Antigen Retrieval by boiling tissue section in EDTA buffer, pH 8.0 for 10 min followed by cooling at RT for 20 min is recommended.
Flow Cyt		Use at an assay dependent concentration. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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 (fukzfterminal 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 (SW/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
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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 IKFZ1 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.

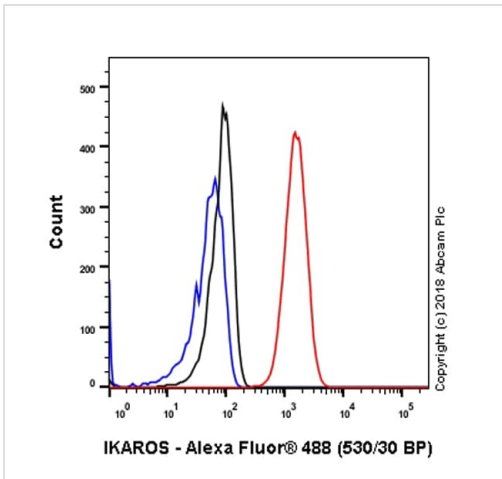
Cellular localization

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).

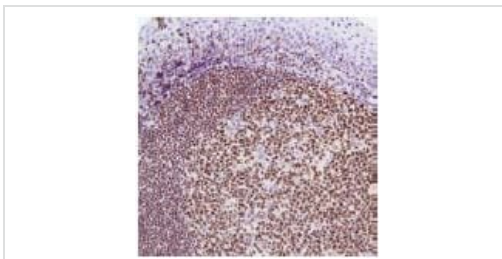
Form

There are 7 isoforms produced by alternative splicing.

Images



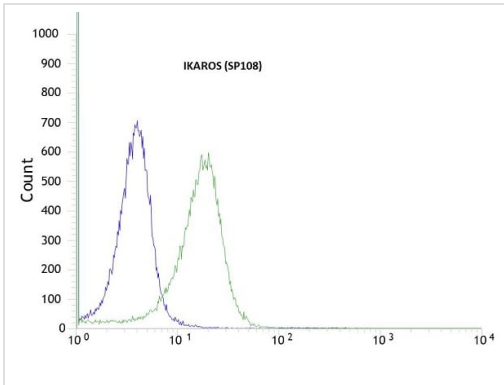
Flow Cytometry - Anti-Ikaros antibody [SP108] (ab105228)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ikaros antibody [SP108] (ab105228)

Flow cytometry analysis of Molt-4 (human acute lymphoblastic leukemia) labeling Ikaros with purified ab105228 at 1/40 dilution (7.725 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG (ab172730) (Black). Unlabeled control -Unlabelled cells (blue).





ab105228, at 1/100 dilution, staining Ikaros in formalin-fixed, paraffin-embedded human tonsil by Immunohistochemistry.



Flow cytometric analysis of rabbit anti-Ikaros (SP108) antibody ab105228 (1/100) in HeLa cells (green) compared to negative control of rabbit IgG (blue).

Flow Cytometry - Anti-Ikaros antibody [SP108] (ab105228)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Ikaros antibody [SP108] (ab105228)

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

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