10320 Camino Santa Fe, Suite G
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Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7)

Catalog # ABO16611

Specification

Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) - Product Information

Application	**WB**
Primary Accession	Q13422
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) . Tested in WB applications. This antibody reacts with Human.

Reconstitution
Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) - Additional Information

Gene ID 10320

Other Names
DNA-binding protein Ikaros, Ikaros family zinc finger protein 1, Lymphoid transcription factor LyF-1, IKZF1, IK1, IKAROS, LYF1, ZNFN1A1

Calculated MW
55-65 kDa KDa

Application Details
Western blot, 0.25-0.5 µg/ml, Human

Contents
Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Ikaros, different from the related mouse sequence by five amino acids.

Purification
Immunogen affinity purified.

Storage	**At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.**

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Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) - Protein Information

Name IKZF1

Synonyms IK1, IKAROS, LYF1, ZNFN1A1

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 (fikzfterminal 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).

Cellular Location
Nucleus. Note=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. [Isoform Ik6]: Cytoplasm.

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

Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) - Images

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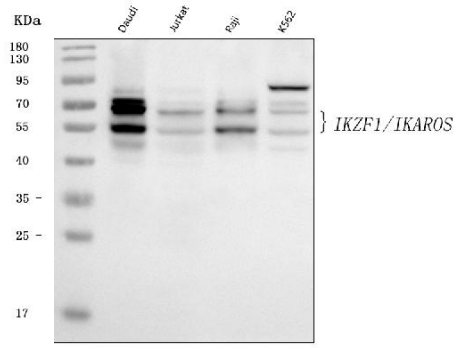

Figure 1. Western blot analysis of Ikaros/IKZF1 using anti-Ikaros/IKZF1 antibody (M00531-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Daudi whole cell lysates,
Lane 2: human Jurkat whole cell lysates,
Lane 3: human Raji whole cell lysates,
Lane 4: human K562 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Ikaros/IKZF1 antigen affinity purified monoclonal antibody (Catalog # M00531-3) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Ikaros/IKZF1 at approximately 55-65 kDa. The expected band size for Ikaros/IKZF1 is at 58 kDa.

Anti-Ikaros/IKZF1 Antibody Picoband™ (monoclonal, 5F12H7) - Background

DNA-binding protein Ikaros is a protein that in humans is encoded by the IKZF1 gene. This gene encodes a transcription factor that belongs to the family of zinc-finger DNA-binding proteins associated with chromatin remodeling. The expression of this protein is restricted to the fetal and adult hemo-lymphopoietic system, and it functions as a regulator of lymphocyte differentiation. Several alternatively spliced transcript variants encoding different isoforms have been described for this gene. Most isoforms share a common C-terminal domain, which contains two zinc finger motifs that are required for hetero- or homo-dimerization, and for interactions with other proteins. The isoforms, however, differ in the number of N-terminal zinc finger motifs that bind DNA and in nuclear localization signal presence, resulting in members with and without DNA-binding properties. Only a few isoforms contain the requisite three or more N-terminal zinc motifs that confer high affinity binding to a specific core DNA sequence element in the promoters of target genes. The non-DNA-binding isoforms are largely found in the cytoplasm, and are thought to function as dominant-negative factors.