

Anti-Ikaros Picoband Antibody

Catalog # ABO12329

Specification

Anti-Ikaros Picoband Antibody - Product Information

Application WB, IHC-P **Primary Accession** Q13422 Rabbit Host Reactivity Human, Mouse, Rat Clonality Polyclonal Format Lyophilized Description Rabbit IgG polyclonal antibody for DNA-binding protein Ikaros(IKZF1) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Ikaros Picoband Antibody - 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 57528 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

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. .

Tissue Specificity

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

Protein Name DNA-binding protein Ikaros

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the C-terminus of human Ikaros (428-459aa LKEEHRAYDLLRAASENSQDALRVVSTSGEQM), different from the related mouse sequence by five amino acids.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-Ikaros Picoband Antibody - 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:17135265,

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 Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot

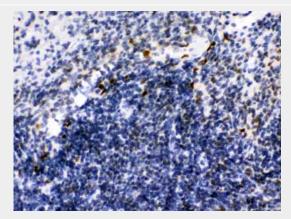


- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

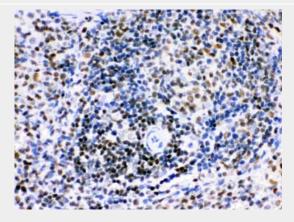
Anti-Ikaros Picoband Antibody - Images

130KD -100KD -70KD -55KD -35KD -25KD -15KD -

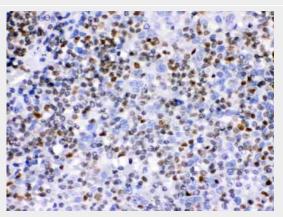
Anti- Ikaros Picoband antibody, ABO12329, Western blottingAll lanes: Anti Ikaros (ABO12329) at 0.5ug/mlWB: HELA Whole Cell Lysate at 40ugPredicted bind size: 58KDObserved bind size: 58KD



Anti- Ikaros Picoband antibody, ABO12329, IHC(P)IHC(P): Mouse Spleen Tissue



Anti- Ikaros Picoband antibody, ABO12329, IHC(P)IHC(P): Rat Spleen Tissue



Anti- Ikaros Picoband antibody, ABO12329, IHC(P)IHC(P): Human Tonsil Tissue

Anti-Ikaros Picoband Antibody - 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.