Datasheet for ABIN2689714

anti-IKZF1 antibody

5 Publications

Go to Product page

Overview

Quantity:	50 µg
Target:	IKZF1
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This IKZF1 antibody is un-conjugated
Application:	Western Blotting (WB), Intracellular Staining (ICS)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Human Ikaros Recombinant Protein
Clone:	R32
Isotype:	IgG1 kappa
Characteristics:	The R32-1149 monoclonal antibody specifically binds to Ikaros, which is encoded by IKZF1 (IKAROS family zinc finger 1). Ikaros is also known as Lymphoid transcription factor LyF-1 (LYF1) and ZNFN1A1 [Zinc finger protein, subfamily 1A, 1 (Ikaros)]. Ikaros belongs to the IKAROS family of zinc-finger transcription factors. This DNA-binding transcription factor forms homodimers and heterodimers with other IKAROS family members. It is involved in the development of lymphoid tissues and remains abundantly expressed in the thymus and by cells within peripheral lymphoid tissues. Ikaros functions in the maturation, differentiation, and homeostasis of various hematopoietic cells including T lymphocytes, B cells, NK cells, and

	neutrophils. Ikaros regulates the expression of a number of genes including various genes expressed during early stages of B- and T-cell development. Several alternatively-spliced human Ikaros isoforms have been described. Abnormal expression of different Ikaros isoforms has been associated with hematologic malignancies. Flow cytometric analysis of 293F cells transfected with members of the IKAROS family has demonstrated that clone R32-1149 is negative on Helios, Aiolos, and Eos transfectants. Analysis of Ikaros Expression Left Panel - Flow cytometric analysis of Ikaros expression on human peripheral blood lymphocytes. Human peripheral blood mononuclear (PBMC) cells were fixed and permeabilized using the BD Pharmingen™ Transcription Factor Buffer Set (Cat. No. 562574/562725). The cells were stained with either Purified Mouse IgG1, κ Isotype Control (Cat. No. 554121, dashed line histogram) or Purified Mouse Anti-Ikaros antibody (Cat. No. 564475, solid line histogram). The cells were washed and stained with PE Goat Anti-Mouse Ig (Cat. No. 550589). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes. Flow cytometric analysis was performed using a BD FACSCanto™ II Flow Cytometer System. Middle Panel - Western blot analysis of Ikaros expressed by human PBMC. A PBMC lysate was electrophoresed (SDS-PAGE) and the cellular proteins were transferred to a membrane where they were probed using Purified Mouse Anti-Ikaros antibody at concentrations of 4 (lane 1), 1 (lane 2), and 0.25 µg/mL (lanes 3). Ikaros was identified in bands ranging in size from ~50-70 kDa. Right Panel - Ikaros staining of human tonsil. Tissue sections were prepared from formalin-fixed paraffin-embedded tonsils. Following antigen retrieval with BD Retrievagen A Buffer (Cat. No. 550524), the sections were stained with either Purified Mouse IgG1 κ Isotype Control (Left Tonsil Section, 20x original) or Purified Mouse Anti-Ikaros antibody (Middle and Right Tonsil sections at 20x and 40x original, respectively). A three-step staining procedure that employs a Biotin Goat Anti-Mouse Immunoglobulin (Cat. No. 550337), Streptavidin-Horseradish Peroxidase (HRP) (Cat. No.550946), and the DAB Substrate Kit (Cat. No. 550880) was used to develop the primary staining reagents. The tissue was counterstained with Hematoxylin. Ikaros staining is detected in the nuclei of some lymphocytes. BD Pharmingen™ Purified Mouse Anti-Human Ikaros - Purified - Clone R32-1149 - Isotype Mouse IgG1, κ - Reactivity Hu, Ms - 50 µg
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	IKZF1
Alternative Name:	Ikaros (IKZF1 Products)
Background:	Synonyms: IKZF1, LYF1, hIk-1, IK1, ZNFN1A1
Pathways:	Production of Molecular Mediator of Immune Response

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:	Yoshida, Landhuis, Dose, Hazan, Zhang, Naito, Jackson, Wu, Perotti, Kaufmann, Gounari, Morgan, Georgopoulos: "Transcriptional regulation of the Ikzf1 locus." in: **Blood**, Vol. 122, Issue 18, pp. 3149-59, (2013) (PubMed). Georgopoulos: "Haematopoietic cell-fate decisions, chromatin regulation and ikaros." in: **Nature reviews. Immunology**, Vol. 2, Issue 3, pp. 162-74, (2002) (PubMed). Westman, Mackay, Gell: "Ikaros: a key regulator of haematopoiesis." in: **The international journal of biochemistry & cell biology**, Vol. 34, Issue 10, pp. 1304-7, (2002) (PubMed). Nietfeld, Meyerhans: "Cloning and sequencing of hIk-1, a cDNA encoding a human homologue of mouse Ikaros/LyF-1." in: **Immunology letters**, Vol. 49, Issue 1-2, pp. 139-41, (1996) (PubMed

).

Molnár, Wu, Largespada, Vortkamp, Scherer, Copeland, Jenkins, Bruns, Georgopoulos: "The Ikaros gene encodes a family of lymphocyte-restricted zinc finger DNA binding proteins, highly conserved in human and mouse." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 156, Issue 2, pp. 585-92, (1996) (PubMed).