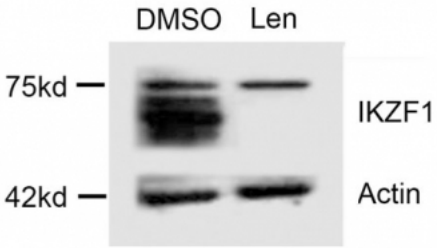
IKAROS Antibody / IKZF1 (F54538)

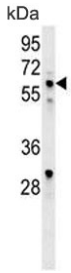
Catalog No.	Formulation	Size
F54538-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54538-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

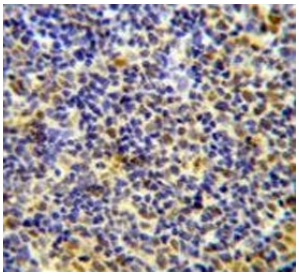
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	Q13422
Localization	Cytoplasmic, nuclear
Applications	Western blot: 1:500-1:2000 Flow cytometry: 1:25 (1x10e6 cells) Immunohistochemistry (FFPE): 1:25
Limitations	This IKAROS antibody is available for research use only.



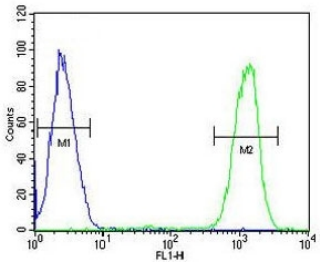
IKZF1 Antibody Lenalidomide Degradation WB. Western blot analysis of multiple myeloma cell lysates treated with DMSO vehicle control or lenalidomide using IKZF1 Antibody demonstrates detection of IKZF1 (Ikaros) at approximately 58â€“75 kDa. Strong IKZF1 expression is observed in DMSO-treated cells, while treatment with lenalidomide results in a marked reduction of IKZF1 protein levels, consistent with the known cereblon-dependent degradation of Ikaros induced by immunomodulatory drugs. The reduction in signal following lenalidomide treatment supports the specificity of the antibody for IKZF1 and demonstrates its utility for monitoring pharmacologic modulation of Ikaros expression. Actin serves as a loading control. Predicted molecular weight: ~58 kDa. Observed molecular weight: approximately 58â€“75 kDa, consistent with known IKZF1 isoforms and post-translationally modified forms.



Western blot testing of human CEM cell lysate with IKAROS antibody. Predicted molecular weight ~58 kDa.



IKAROS Antibody Human Tonsil IHC. Immunohistochemical staining of FFPE human tonsil tissue using IKAROS Antibody demonstrates prominent nuclear HRP-DAB brown staining within subsets of lymphoid cells. The staining pattern is consistent with expression of Ikaros (IKZF1), a zinc finger transcription factor that functions as a master regulator of lymphocyte differentiation, hematopoietic development, and immune cell lineage commitment. Predominantly nuclear immunoreactivity is expected for this DNA-binding protein and highlights its critical role in controlling transcriptional programs required for normal immune system development and lymphoid cell function. The observed staining supports the utility of this antibody for immunohistochemical detection of endogenous IKZF1 in lymphoid tissues. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IKAROS Antibody CEM Flow Cytometry. Flow cytometric analysis of human CEM cells stained with IKAROS Antibody demonstrates a pronounced rightward shift of the positive population (green histogram) relative to the isotype control (blue histogram). The observed fluorescence profile is consistent with expression of Ikaros (IKZF1), a zinc finger transcription factor that functions as a master regulator of lymphocyte differentiation, hematopoietic development, and immune cell lineage commitment. The clear separation between the antibody-stained and control populations supports specific detection of endogenous IKZF1 by intracellular flow cytometry and demonstrates the utility of this antibody for FACS applications. Blue = isotype control. Green = IKAROS antibody.

Description

IKAROS Antibody recognizes Ikaros (IKZF1), a member of the Ikaros family of zinc finger transcription factors that plays a fundamental role in the development and function of the immune system. Ikaros acts as a sequence-specific DNA-binding protein that regulates transcriptional programs controlling hematopoietic stem cell maintenance, lymphoid lineage commitment, and immune cell maturation. Through interactions with chromatin-remodeling complexes and transcriptional regulatory machinery, Ikaros helps establish the gene expression patterns required for normal blood cell development and immune homeostasis.

IKAROS Antibody is widely used for studying the molecular mechanisms that govern lymphocyte differentiation and hematopoietic development. Ikaros expression is detected in hematopoietic progenitors and multiple immune cell populations where it influences the formation and maturation of B cells, T cells, natural killer cells, and other lymphoid lineages. The protein functions as a central developmental regulator that coordinates lineage-specific transcriptional programs while suppressing inappropriate gene expression pathways. As a result, Ikaros is considered a key determinant of immune cell identity and function.

IKAROS Antibody is also valuable for investigations of nuclear organization and epigenetic regulation. Ikaros proteins can recruit chromatin-modifying complexes to specific genomic regions and participate in higher-order chromatin architecture. These activities allow Ikaros to regulate large networks of genes involved in cellular proliferation, differentiation, and survival. By linking chromatin structure to transcriptional control, Ikaros serves as an important mediator of developmental gene regulation within the hematopoietic system.

IKAROS Antibody has become particularly important in the study of hematologic malignancies. Alterations in IKZF1 expression or function are associated with acute lymphoblastic leukemia, multiple myeloma, and other lymphoid cancers. Ikaros is also a clinically relevant target of immunomodulatory drugs such as lenalidomide, which promote cereblon-mediated degradation of IKZF1 and contribute to therapeutic activity in certain hematologic malignancies. Consequently, Ikaros is frequently evaluated in studies of cancer biology, drug response, and disease progression.

IKAROS Antibody supports research involving hematopoiesis, lymphocyte differentiation, immune regulation, epigenetics, transcriptional control, leukemia, lymphoma, and multiple myeloma. As a critical regulator of immune cell development and gene expression, Ikaros remains an important target for understanding both normal immune system function and the molecular basis of hematologic disease.

Researchers studying lymphoid development, hematopoietic differentiation, and immune cell lineage commitment may also be interested in our IKZF1 Antibody / Lymphoid Development Transcription Factor Antibody.

Application Notes

The stated application concentrations are suggested starting points. Titration of the IKAROS antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 415-444 from the human protein was used as the immunogen for the IKAROS antibody.

Storage

Aliquot the IKAROS antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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