

IKZF2 Antibody

Catalog # ASC11900

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UKS7
Other Accession	NP_057344 , 119220596
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	59574
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IKZF2 antibody can be used for detection of IKZF2 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	22807
Other Names	Zinc finger protein Helios, Ikaros family zinc finger protein 2, IKZF2, HELIOS, ZNFN1A2
Target/Specificity	IKZF2; IKZF2 antibody is human, mouse and rat reactive. At least two isoforms of IKZF2 are known to exist; this antibody will detect both isoforms. IKZF2 antibody is predicted to not cross-react with other IKZF proteins.
Reconstitution & Storage	IKZF2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	IKZF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IKZF2
Synonyms	HELIOS, ZNFN1A2
Function	Transcription factor, which stabilizes the noninflammatory phenotype of regulatory T cells (Tregs) (By similarity). May possibly act via STAT5-mediated signaling (By similarity). Binds IL2 promoter and represses its transcription, possibly by epigenetic silencing, inducing deacetylation of core histones in the IL2 promoter (PubMed: 37316189). In Tregs, required for FOXP3 recruitment to the IL2 promoter (By similarity). Required for outer hair cells maturation and, consequently, for hearing (By similarity).

Cellular Location	Nucleus. Note=Associates with IKZF1/Ikaros at centromeric heterochromatin in T-cell nuclei {ECO:0000250 UniProtKB:P81183}
Tissue Location	Expressed in various types of T cells, including developing thymocytes, activated T cells and regulatory T cells (PubMed:34826260). Expressed in mucosal-associated invariant T (MAIT) cells both during their thymic development and their activation in the periphery (PubMed:34826260).

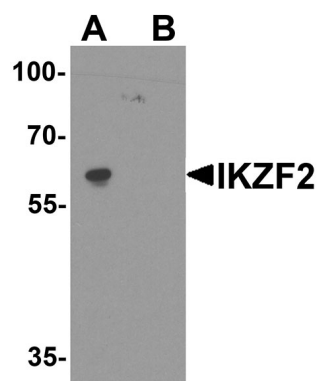
Background

The Ikaros family zinc finger 2 (IKZF2) is a member of the Ikaros family of zinc-finger proteins, a family of hematopoietic-specific transcription factors involved in the regulation of lymphocyte development (1,2). IKZF2 forms homo- or hetero-dimers with other Ikaros family members, and is thought to function predominantly in early hematopoietic development (3). Its expression is a marker for T cell activation and proliferation (4).

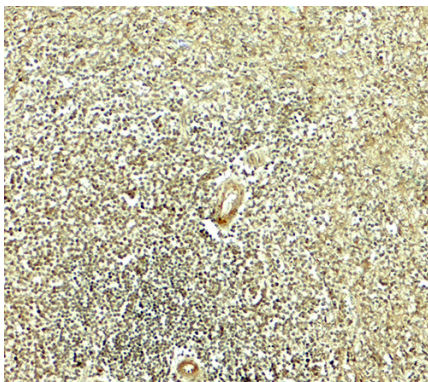
References

Hahm K, Cobb BS, McCarty AS, et al. Helios, a T cell-restricted Ikaros family member that quantitatively associates with Ikaros at centromeric heterochromatin. *Genes Dev.* 1998; 12:782-96.
 John LB and Ward AC. The Ikaros gene family: transcriptional regulators of hematopoiesis and immunity. *Mol. Immunol.* 2011; 48:1272-8.
 Kelly CM, Ikeda T, Koipally J, et al. Helios, a novel dimerization partner of Ikaros expressed in the earliest hematopoietic progenitors. *Curr. Biol.* 1998; 8:508-15.
 Akimova T, Beier UH, Wang L, et al. Helios expression is a marker for T cell activation and proliferation. *PLoS One* 2011; 6:e24226.

Images

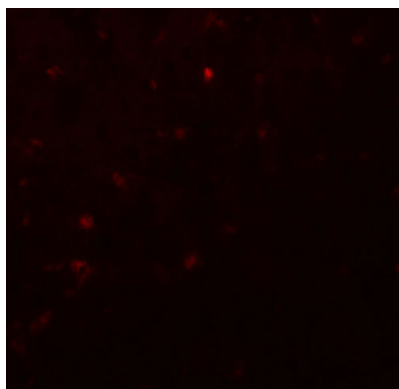


Western blot analysis of IKZF2 in EL4 cell lysate with IKZF2 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of IKZF2 in human spleen tissue with IKZF2 antibody at 5 µg/mL.

Immunofluorescence of IKZF2 in human spleen tissue with IKZF2 antibody at 20 µg/mL.



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