

Go-ChIP-Grade™ Purified anti-human Ikaros Antibody

Catalog# / Size	687103 / 25 µg
Clone	16B5C71
Regulatory Status	RUO
Other Names	IK1, IKZF1
Isotype	Mouse IgG2a, κ
Description	Ikaros, also known as IKZF1, belongs to a family of zinc-finger DNA-binding proteins that regulate lymphocyte differentiation. It has the ability to form homo- and heterodimers with other members of the Ikaros family, which include Aiolos and Helios. Ikaros can be found on a majority of fetal and adult hematopoietic cell types such as T- and B-cells, natural killer cells (NKs), monocytes/macrophages, and dendritic cells. Ikaros is a tumor suppressor and its absence or reduced expression has been reported in several leukemias.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human Ikaros peptide (431-477 aa) conjugated to KLH Freund's adjuvant.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	ChIP - Quality tested WB - Verified
Recommended Usage	Each lot of this antibody is quality control tested by ChIP assay. The recommended starting antibody to chromatin ratio is 4 µg of antibody and 5 µg of chromatin per IP. Optimal antibody to chromatin ratio should be determined by the end user. For Western blotting, the suggested use of this reagent is 0.5 - 2.0 µg per mL. It is recommended that the reagent to be titrated for optimal performance before each experiment.
Application Notes	There are eight splicing variants with predicted MW 58, 53, 48(2), 43, 41, 31, 24 kDa. This antibody might recognize some of the isoforms.
RRID	AB_2721587 (BioLegend Cat. No. 687103)

Antigen Details

Structure	Zinc-finger DNA binding protein, homo/heterodimer, 57.5 kD
Distribution	Fetal and adult hematopoietic cells.
Function	Regulates lymphocyte differentiation.
Interaction	DNA.
Cell Type	B cells, Dendritic cells
Biology Area	Cell Biology, Chromatin Remodeling/Epigenetics, Immunology, Signal Transduction, Transcription Factors

Molecular Family Nuclear Markers

Antigen References

1. Wagnier A, *et al.* 1995. *Proc. Natl. Acad. Sci. USA* 92:6930.
2. Tonnel C, *et al.* 2009. *Mol. Immunol.* 46:1736.
3. Wang H, *et al.* 2014. *Pediatr. Blood Cancer* 61:2230.

Gene ID [10320](#)

Related Protocols

[BioLegend's Tools for Chromatin Immunoprecipitation \(ChIP\) Assays - Video](#)

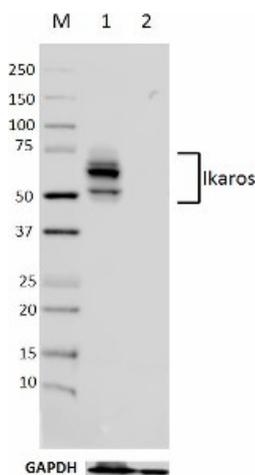
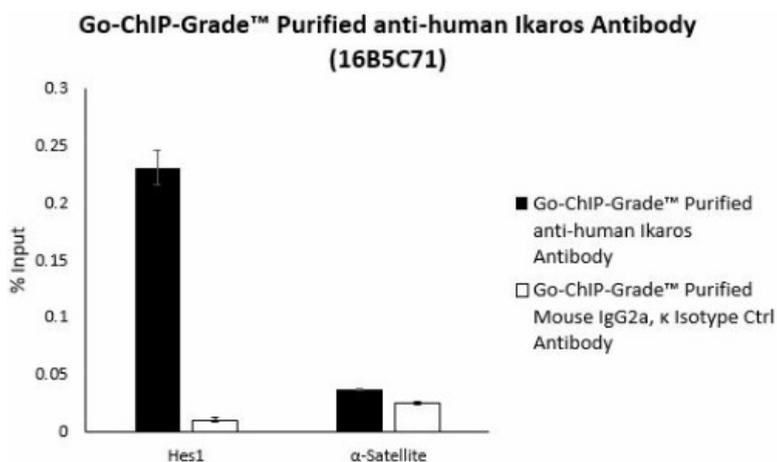
[Chromatin Immunoprecipitation \(ChIP\) Assay Protocol](#)

[Western Blotting Protocol](#)

Other Formats

Purified anti-human Ikaros, Alexa Fluor® 647 anti-human Ikaros, Brilliant Violet 421™ anti-human Ikaros, Alexa Fluor® 488 anti-human Ikaros, PE anti-human Ikaros, APC anti-human Ikaros, PE/Cyanine7 anti-human Ikaros

Product Data



Chromatin Immunoprecipitations (ChIP) were done with fixed and sonicated chromatin samples from Jurkat cells. ChIP was performed with 5 µg of chromatin and either 4 µg of Go-ChIP-Grade™ purified anti-human Ikaros antibody (clone 16B5C71, Cat. No. 687104), or equal amount of Go-ChIP-Grade™ purified mouse IgG2a, κ isotype ctrl antibody (clone MG2a-53, Cat. No. 401506). The enriched DNA was purified and quantified by real-time qPCR using SYBR Green and primers for the human Hes1 promoter region, and the human α-Satellite repeat element. The amount of immunoprecipitated DNA in each sample is represented as a percentage of the total amount of input chromatin, which is equivalent to 100%.

Total lysates (15 µg protein) from Jurkat and HeLa cells were resolved by electrophoresis (4-20% Tris-Glycine gel), transferred to nitrocellulose, and probed with 0.5 µg/mL Go-ChIP-Grade™ Purified anti-ikaros Antibody, clone 16B5C71 (upper), or 1:2000 diluted anti-GAPDH Antibody (lower). Proteins were visualized by chemiluminescence detection using a 1:3000 diluted goat anti-mouse-IgG secondary antibody conjugated to HRP for the anti-ikaros Antibody, or 1:3000 diluted donkey anti-Rabbit-IgG secondary antibody conjugated to HRP for anti-GAPDH Antibody. Lane M: Molecular weight ladder; 1: Jurkat; 2: HeLa.

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