

**#5443** Store at -20°C

# Ikaros Antibody


**Cell Signaling**  
TECHNOLOGY®

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> WB, W-S, IP	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 50-70	<b>Source:</b> Rabbit	<b>UniProt ID:</b> #Q13422	<b>Entrez-Gene Id:</b> 10320
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## Product Usage Information

### Application

Western Blotting  
Simple Western™  
Immunoprecipitation

### Dilution

1:1000  
1:10 - 1:50  
1:50

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

Ikaros Antibody detects endogenous levels of total Ikaros protein. It is expected to recognize all isoforms of Ikaros protein produced by differential splicing.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro329 of human Ikaros protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

The Ikaros family of zinc-finger DNA-binding proteins belongs to the Kruppel transcription factor superfamily. Ikaros proteins are characterized by the presence of an amino-terminal zinc finger DNA-binding domain and a carboxy-terminal dimerization domain. Members of the Ikaros family include Ikaros, Aiolos, Helios, EOS, and Pegasus (1). All family members can form homodimers and heterodimers with other members of the Ikaros family. Most also contain multiple isoforms that are generated as a result of differential splicing, with some isoforms behaving in a dominant negative manner upon dimerization (2).

Ikaros (IKZF1, LYF1) is the prototypical Ikaros family zinc-finger transcription factor and is expressed abundantly in lymphoid cells. Genetic studies in mice demonstrate that Ikaros is a tumor suppressor that is important for the normal development of B, T, natural killer, and dendritic cells (3,4). Additional studies show that imbalanced expression of different Ikaros isoforms, as well as mutations in the corresponding *IKAROS* gene, can be associated with a number of hematologic malignancies in humans (2,5,6).

## Background References

- Perdomo, J. et al. (2000) *J Biol Chem* 275, 38347-54.
- Rebollo, A. and Schmitt, C. (2003) *Immunol Cell Biol* 81, 171-5.
- Georgopoulos, K. et al. (1997) *Annu Rev Immunol* 15, 155-76.
- Nichogiannopoulou, A. et al. (1998) *Semin Immunol* 10, 119-25.
- Tonnelle, C. et al. (2002) *Leuk Lymphoma* 43, 29-35.
- Martinelli, G. et al. (2009) *J Clin Oncol* 27, 5202-7.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**WB:** Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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