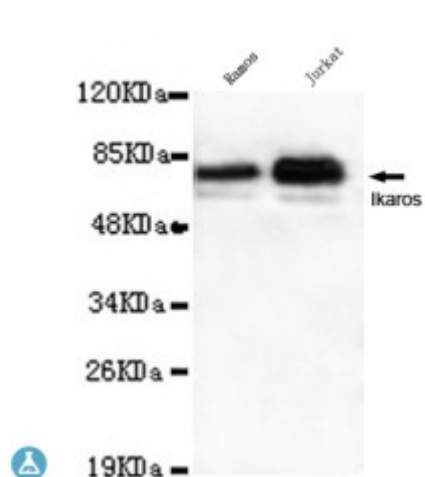


## Anti-Ikaros antibody



<b>Description</b>	Mouse monoclonal to Ikaros.
<b>Model</b>	STJ99100
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Applications</b>	ELISA, WB
<b>Immunogen</b>	Purified recombinant human Ikaros (C-term) protein fragments expressed in E.coli.
<b>Immunogen Region</b>	C-term
<b>Gene ID</b>	<a href="#">10320</a>
<b>Gene Symbol</b>	<a href="#">IKZF1</a>
<b>Dilution range</b>	WB 1:500-2000ELISA 1:10000-20000
<b>Specificity</b>	This antibody detects endogenous levels of Ikaros (C-term) and does not cross-react with related proteins.
<b>Tissue Specificity</b>	Abundantly expressed in thymus, spleen and peripheral blood Leukocytes and lymph nodes. Lower expression in bone marrow and small intestine.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clone ID</b>	1A12-F2-D8
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	DNA-binding protein Ikaros Ikaros family zinc finger protein 1 Lymphoid

	transcription factor LyF-1
<b>Molecular Weight</b>	58kDa
<b>Clonality</b>	Monoclonal
<b>Conjugation</b>	Unconjugated
<b>Isotype</b>	IgG1
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="#">HGNC:13176</a> <a href="#">OMIM:603023</a>
<b>Alternative Names</b>	DNA-binding protein Ikaros Ikaros family zinc finger protein 1 Lymphoid transcription factor LyF-1
<b>Function</b>	Transcription regulator of hematopoietic cell differentiation . Binds gamma-satellite DNA . Plays a role in the development of lymphocytes, B- and T-cells. Binds and activates the enhancer (delta-A element) of the CD3-delta gene. Repressor of the TDT (fikzfterminal deoxynucleotidyltransferase) gene during thymocyte differentiation. Regulates transcription through association with both HDAC-dependent and HDAC-independent complexes. Targets the 2 chromatin-remodeling complexes, NuRD and BAF (SWI/SNF), in a single complex (PYR complex), to the beta-globin locus in adult erythrocytes. Increases normal apoptosis in adult erythroid cells. Confers early temporal competence to retinal progenitor cells (RPCs) . Function is isoform-specific and is modulated by dominant-negative inactive isoforms .
<b>Sequence and Domain Family</b>	The N-terminal zinc-fingers 2 and 3 are required for DNA binding as well as for targeting IKFZ1 to pericentromeric heterochromatin. The C-terminal zinc-finger domain is required for dimerization.
<b>Cellular Localization</b>	Nucleus. In resting lymphocytes, distributed diffusely throughout the nucleus. Localizes to pericentromeric heterochromatin in proliferating cells. This localization requires DNA binding which is regulated by phosphorylation / dephosphorylation events. Isoform Ik2: Nucleus. In resting lymphocytes, distributed diffusely throughout the nucleus. Localizes to pericentromeric heterochromatin in proliferating cells. This localization requires DNA binding which is regulated by phosphorylation / dephosphorylation events . Isoform Ik6: Cytoplasm
<b>Post-translational Modifications</b>	Phosphorylation controls cell-cycle progression from late G(1) stage to S stage. Hyperphosphorylated during G2/M phase. Dephosphorylated state during late G(1) phase. Phosphorylation on Thr-140 is required for DNA and pericentromeric location during mitosis. CK2 is the main kinase, in vitro. GSK3 and CDK may also contribute to phosphorylation of the C-terminal serine and threonine residues. Phosphorylation on these C-terminal residues reduces the DNA-binding ability. Phosphorylation/dephosphorylation events on Ser-13 and Ser-295 regulate TDT expression during thymocyte differentiation. Dephosphorylation by protein phosphatase 1 regulates stability and pericentromeric heterochromatin location. Phosphorylated in both lymphoid and non-lymphoid tissues . Phosphorylation at Ser-361 and Ser-364 downstream of SYK induces nuclear translocation. Sumoylated. Simultaneous sumoylation on the 2 sites results in a loss of both HDAC-

dependent and HDAC-independent repression. Has no effect on pericentromeric heterochromatin location. Desumoylated by SENP1 . Polyubiquitinated.

---

**St John's Laboratory Ltd**

**F** +44 (0)207 681 2580

**T** +44 (0)208 223 3081

**W** <http://www.stjohnslabs.com/>

**E** [info@stjohnslabs.com](mailto:info@stjohnslabs.com)