

## **Product datasheet for SC331776**

## OriGene Technologies, Inc.

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## Ikaros (IKZF1) (NM\_001220771) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Ikaros (IKZF1) (NM\_001220771) Human Untagged Clone

Tag: Tag Free Symbol: Ikaros

**Synonyms:** CVID13; Hs.54452; IK1; IKAROS; LyF-1; LYF1; PPP1R92; PRO0758; ZNFN1A1

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC331776 representing NM\_001220771.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGATGCTGATGAGGGTCAAGACATGTCCCAAGTTTCAGGGAAAGGCAAAGCCCCCCTGTAAGCGATACT CCAGATGAGGGCGATGAGCCCATGCCGATCCCCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGC TCCAAGAGTGACAGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAATGGGCCGT GCCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATGCCTCGGGAGAGAAAATG AATGGCTCCCACAGGGACCAAGGCAGCTCGGCTTTGTCGGGAGGTTGGAGGCATTCGACTTCCTAACGGA AAACTAAAGTGTGATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATGGTTCACAAAAGAAGC CACACTGGGGACAAGGGCCTGTCCGACACGCCCTACGACAGCAGCGCCAGCTACGAGAAGGAGAACGAA ATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACGCCATCAACTACCTGGGGGCCCGAGTCCCTG CGCCCGCTGGTGCAGACGCCCCCGGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTG CACAAGCCGCTCGCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAGCGCCGTGGAGAACCTG CTGCTGCTCCCAAGGCCAAGTTGGTGCCCTCGGAGCGCGAGGCGTCCCCGAGCAACAGCTGCCAAGAC CCGCACGCGCAACGGGCTGTCGCTCAAGGAGGAGCACCGCGCCTACGACCTGCTGCGCGCCCCCCC GAGAACTCGCAGGACGCGCTCCGCGTGGTCAGCACCAGCGGGGAGCAGATGAAGGTGTACAAGTGCGAA CACTGCCGGGTGCTCTTCCTGGATCACGTCATGTACACCATCCACATGGGCTGCCACGGCTTCCGTGAT CCTTTTGAGTGCAACATGTGCGGCTACCACAGCCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGA

GGGGAGCACCGCTTCCACATGAGCTAA

Restriction Sites: Sgfl-Mlul

**ACCN:** NM\_001220771

**Insert Size:** 1131 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).





Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** <u>NM 001220771.1</u>

 RefSeq Size:
 5788 bp

 RefSeq ORF:
 1131 bp

 Locus ID:
 10320

 UniProt ID:
 Q13422

 Cytogenetics:
 7p12.2

**Protein Families:** Druggable Genome, Transcription Factors

MW: 41.2 kDa

**Gene Summary:** 

This gene encodes a transcription factor that belongs to the family of zinc-finger DNA-binding proteins associated with chromatin remodeling. The expression of this protein is restricted to the fetal and adult hemo-lymphopoietic system, and it functions as a regulator of lymphocyte differentiation. Several alternatively spliced transcript variants encoding different isoforms have been described for this gene. Most isoforms share a common C-terminal domain, which contains two zinc finger motifs that are required for hetero- or homo-dimerization, and for interactions with other proteins. The isoforms, however, differ in the number of N-terminal zinc finger motifs that bind DNA and in nuclear localization signal presence, resulting in members with and without DNA-binding properties. Only a few isoforms contain the requisite three or more N-terminal zinc motifs that confer high affinity binding to a specific core DNA sequence element in the promoters of target genes. The non-DNA-binding isoforms are largely found in the cytoplasm, and are thought to function as dominant-negative factors. Overexpression of some dominant-negative isoforms have been associated with B-cell malignancies, such as acute lymphoblastic leukemia (ALL). [provided by RefSeq, May 2014] Transcript Variant: This variant (8) lacks three consecutive alternate in-frame exons in the central coding region, compared to variant 1. The encoded isoform (8, also known as Ik-5 as described in PMID:12937159) is shorter than isoform 1. This isoform contains only one Nterminal zinc finger motif, and represents a non-DNA-binding, dominant-negative isoform. Sequence Note: The 5' UTR of this variant is incomplete because there are no full-length transcripts supporting this variant, and there is splicing ambiguity in the 5' UTR. CCDS Note: This exon combination of this CCDS representation lacks support from transcripts deposited in INSDC databases. It represents the Ik-5 variant that is supported by RT-PCR data in PMID:12937159.