

## Product datasheet for RC238199

### Ikaros (IKZF1) (NM\_001291838) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ikaros (IKZF1) (NM_001291838) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IKZF1
Synonyms:	CVID13; Hs.54452; IK1; IKAROS; LyF-1; LYF1; PPP1R92; PRO0758; ZNFN1A1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC238199 representing NM_001291838 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGATGCTGATGAGGGTCAAGACATGTCCAAGTTTCAGGGAAGGAAAGCCCCCTGTAAGCGATACTC  
CAGATGAGGGCGATGAGCCCATGCCGATCCCCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGCTC  
CAAGAGTGACAGAGTCGTGGGAGAACGGCCCTTCCAGTGAATCAGTGGGGGCCTCATTACCCAGAAG  
GGCAACCTGCTCCGGCACATCAAGCTGCATTCCGGGGAGAAGCCCTTCAAATGCCACCTCTGCAACTACG  
CCTGCCGCCGGAGGGACGCCCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAAACCTCACAAATGTGG  
ATATTGTGGCCGAAGCTATAAACAGCGAAGCTCTTTAGAGGAACATAAAGAGCGCTGCCACAACACTTTG  
GAAAGCATGGGCCTTCCGGGCACACTGTACCCAGTCATTAAGAAGAAACTAATCACAGTGAAATGGCAG  
AAGACCTGTGCAAGATAGGATCAGAGAGATCTCTCGTGTGGACAGACTAGCAAGTAACGTGCCAAACG  
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AGCTACGAGAAGGAGAACGAAATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACGCCATCAACT  
ACCTGGGGCCGAGTCCCTGCGCCGCTGGTGCAGACGCCCCCGGGCGGTTCCGAGGTGGTCCCGTCCAT  
CAGCCCGATGTACCAGCTGCACAAGCCGCTCGCGGAGGGCACCCCGCGCTCCAACCACTCGGCCAGGAC  
AGCGCCGTGGAGAACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCTCGGAGCGGAGGCGTCCCCGA  
GCAACAGCTGCCAAGACTCCACGGACACCGAGAGCAACAACGAGGAGCAGCGCAGCGGTCTCATCTACCT  
GACCAACCACATCGCCCCGACGCGCGCAACGGGCTGTCGCTCAAGGAGGAGCACCGCGCTACGACCTG  
CTGCGCGCCGCTCCGAGAACTCGCAGGACGCGCTCCGCGTGGTCAACAGCAGCGGGGAGCAGATGAAGG  
TGTACAAGTGGCAACACTGCCGGTGTCTTCTGGATCAGTCACTGTACACCATCCACATGGGCTGCCA  
CGGCTTCCGTGATCCTTTTGTGAGTGAACATGTGCGGCTACCACAGCCAGGACCGGTACGAGTTCTCGTCG  
CACATAACGCGAGGGGAGCACCGCTTCCACATGAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC238199 representing NM\_001291838  
 Red=Cloning site Green=Tags(s)

MDADEGQDMSQVSGKESPPVSDTPDEGDEPMPPIPEDLSTTSGGQQSSKSDRVVGERPFQCNQCGASFTQK  
 GNLLRHIKLHSGEKPFKCHLCNYACRRRDALTGHLRTHSVGKPHKCGYCGRSYKQRSSLEEHKERCHNYL  
 ESMGLPGTLYPVIKEETNHSEMAEDLCKIGSERSLVDRLASNVAKRKSSMPQKFLGDKGLSDTPYDSSA  
 SYEKENEMMKSHVMDQAINNAINYLGAESLRPLVQTPPGGSEVVPVISPMPYQLHKPLAEGTPRSNHSAQD  
 SAVENLLLLSKAKLVPSEREASPSNSCQDSTDESNNEEQRSGLIYL.TNHIAPHARNGLSLKEEHAYDL  
 LRAASENSQDALRVVSTSGEQMKVYKCEHCRVLF.LDHVMTIHMGCHEFRDPFECNMGYHSQDRYEFSS  
 HITRGEHRFHMS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

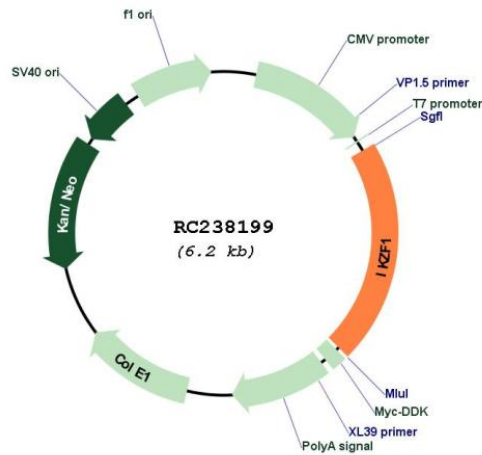
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001291838

<b>ORF Size:</b>	1296 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001291838.2</a>
<b>RefSeq Size:</b>	6029 bp
<b>RefSeq ORF:</b>	1299 bp
<b>Locus ID:</b>	10320
<b>UniProt ID:</b>	<a href="#">Q13422</a>
<b>Cytogenetics:</b>	7p12.2
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	48.7 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]