

### **Product datasheet for RC237226**

#### OriGene Technologies, Inc.

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## Ikaros (IKZF1) (NM\_001291840) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Ikaros (IKZF1) (NM 001291840) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Ikaros

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

Mammalian Cell Neomycin

Selection:

Vector:

ion:

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC237226 representing NM\_001291840
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

pCMV6-Entry (PS100001)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC237226 representing NM\_001291840

Red=Cloning site Green=Tags(s)

MDADEGQDMSQVSGKESPPVSDTPDEGDEPMPIPEDLSTTSGGQQSSKSDRVVGDKGLSDTPYDSSASYE KENEMMKSHVMDQAINNAINYLGAESLRPLVQTPPGGSEVVPVISPMYQLHKPLAEGTPRSNHSAQDSAV ENLLLLSKAKLVPSEREASPSNSCQDSTDTESNNEEQRSGLIYLTNHIAPHARNGLSLKEEHRAYDLLRA ASENSQDALRVVSTSGEQMKVYKCEHCRVLFLDHVMYTIHMGCHGFRDPFECNMCGYHSQDRYEFSSHIT

**RGEHRFHMS** 

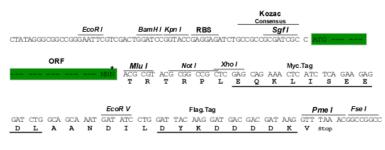
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001291840

ORF Size: 867 bp

OTI Disclaimer: 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. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001291840.1</u>, <u>NP 001278769.1</u>

 RefSeq Size:
 5373 bp

 RefSeq ORF:
 870 bp

 Locus ID:
 10320

 UniProt ID:
 Q13422

 Cytogenetics:
 7p12.2

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

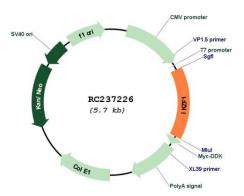
MW: 32.4 kDa

**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]



# **Product images:**



Circular map for RC237226