

## Product datasheet for **RG236285**

### Ikaros (IKZF1) (NM\_001291845) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ikaros (IKZF1) (NM\_001291845) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Ikaros  
**Synonyms:** CVID13; Hs.54452; IK1; IKAROS; LyF-1; LYF1; PPP1R92; PRO0758; ZNFN1A1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236285 representing NM\_001291845.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGATGCTGATGAGGGTCAAGACATGTCCCAAGTTTCAGGGAAGGAAAGCCCCCTGTAAGCGATACT
CCAGATGAGGGCGATGAGCCCATGCCGATCCCCGAGGACCTCTCCACCACCTCGGAGGACAGCAAAGC
TCCAAGAGTGACAGAGTCGTGGTTACATATGGGGCTGATGACTTTAGGGATTTCCATGCAATAATCCC
AAATCTTCTCTCGTAAGTATATGCCTTGCTTCTGGAAAACAAAAGCATGCCTTCATCTCCTATCATGT
AAATATCGTACGTGCATGTTCTTCATCAACCCCGAGATACATTAATATTCACCTGTTCTATTCGTTA
GACACCTACCATATCATTGTTGGTATTATACCATAAAGTGCAAACGAAGGTCTAGGCAGTTGTGCG
GTGTCCTGGGAGCATGGCAGTGGAGTAACAGTAAGGGTTGGAGTCACAGTACACTGATGGGATTGTTA
CTTCGCAGATGCTGCTGGACAGCTTTGAGATTACTCCTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236285  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MDADEGQDMSQVSGKESPPVSDTPDEGDEPMPIPEDLSTTSGGQQSSKSDRVVVYTGADDFRDFHAIIP
KFSFRKYMPCFWTKACLHLLSCKYRTCMFLHQPPRYIKYSLFYSLDTHYHIFGYLYHKVQNEGLGSCA
VSWEHSGVTVRVGVTVALMGLLLRRCWTALRLLL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDVSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:** SgfI-MluI



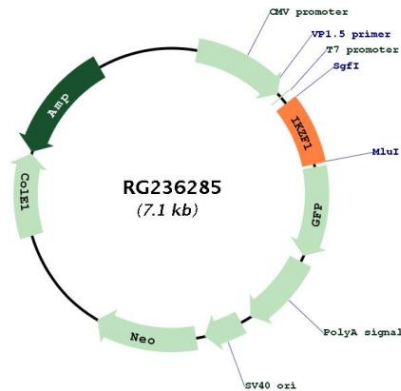
[View online >](#)

**Cloning Scheme:**


- ACCN:** NM\_001291845
- ORF Size:** 522 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).
- RefSeq:** [NM\\_001291845.2](#)
- RefSeq Size:** 1896 bp
- RefSeq ORF:** 525 bp
- Locus ID:** 10320
- Cytogenetics:** 7p12.2
- Protein Families:** Druggable Genome, Transcription Factors
- MW:** 20.1 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 RG236285