

Product datasheet for SC311120

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Ikaros (IKZF1) (NM_006060) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ikaros (IKZF1) (NM_006060) Human Untagged Clone

Tag: Tag Free Symbol: Ikaros

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

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)



Fully Sequenced ORF: >SC311120 representing NM_006060.

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

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

CCAGATGAGGGCGATGAGCCCATGCCGATCCCCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGC TCCAAGAGTGACAGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAATGGGCGT GCCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATGCCTCGGGAGAGAAAATG AATGGCTCCCACAGGGACCAAGGCAGCTCGGCTTTGTCGGGAGTTGGAGGCATTCCGACTTCCTAACGGA AAACTAAAGTGTGATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATGGTTCACAAAAGAAGC CACACTGGAGAACGGCCCTTCCAGTGCAATCAGTGCGGGGCCTCATTCACCCAGAAGGGCAACCTGCTC AGGGACGCCCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAAACCTCACAAATGTGGATATTGTGGC CGAAGCTATAAACAGCGAAGCTCTTTAGAGGAACATAAAGAGCGCTGCCACAACTACTTGGAAAGCATG GGCCTTCCGGGCACACTGTACCCAGTCATTAAAGAAGAAACTAATCACAGTGAAATGGCAGAAGACCTG TGCAAGATAGGATCAGAGAGATCTCTCGTGCTGGACAGACTAGCAAGTAACGTCGCCAAACGTAAGAGC TCTATGCCTCAGAAATTTCTTGGGGACAAGGGCCTGTCCGACACGCCCTACGACAGCAGCGCCAGCTAC GAGAAGGAGAACGAAATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACGCCATCAACTACCTG GGGGCCGAGTCCCTGCGCCCGCTGGTGCAGACGCCCCCGGGCGGTTCCGAGGTGGTCCCGGTCATCAGC CCGATGTACCAGCTGCACAAGCCGCTCGCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAGC GCCGTGGAGAACCTGCTGCTGCTCCCAAGGCCAAGTTGGTGCCCTCGGAGCGCGAGGCGTCCCCGAGC AACAGCTGCCAAGACTCCACGGACACCGAGAGCAACAACGAGGAGCAGCGCAGCGGTCTCATCTACCTG ACCAACCACATCGCCCCGCACGCGCCAACGGGCTGTCGCTCAAGGAGGAGCACCGCGCCTACGACCTG CTGCGCGCCCCCCCGAGAACTCGCAGGACGCCCCCCGCGTGGTCAGCACCAGCGGGGAGCAGATGAAG GTGTACAAGTGCGAACACTGCCGGGTGCTCTTCCTGGATCACGTCATGTACACCATCCACATGGGCTGC CACGGCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCACAGCCAGGACCGGTACGAGTTCTCG TCGCACATAACGCGAGGGGAGCACCGCTTCCACATGAGCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul
ACCN: NM_006060
Insert Size: 1560 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercare team at <a href="mailto:customercare

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. <u>More info</u>



OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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 006060.5</u>

 RefSeq Size:
 6317 bp

 RefSeq ORF:
 1560 bp

 Locus ID:
 10320

 UniProt ID:
 Q13422

 Cytogenetics:
 7p12.2

 Domains:
 zf-C2H2

Protein Families: Druggable Genome, Transcription Factors

MW: 57.5 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 (1) encodes the longest isoform (1, also known as Ik-1 as described in PMID:12937159). This isoform contains four N-terminal zinc finger motifs, binds

DNA, and is localized to the nucleus.