

Product datasheet for **RC213207**

Ikaros (IKZF1) (NM_006060) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Ikaros (IKZF1) (NM_006060) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Ikaros |
| Synonyms: | CVID13; Hs.54452; IK1; IKAROS; LyF-1; LYF1; PPP1R92; PRO0758; ZNFN1A1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>RC213207 representing NM_006060
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGCTGATGAGGGTCAAGACATGTCCCAAGTTTCAGGGAAGGAAAGCCCCCTGTAAGCGATACTC
 CAGATGAGGGCGATGAGCCCATGCCGATCCCCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGCTC
 CAAGAGTGACAGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAATGGGCGTGCC
 TGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATGCCTCGGGAGAGAAAATGAATG
 GCTCCACAGGGACCAAGGCAGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCTAACGAAAACCT
 AAAGTGTGATATCTGTGGGATCATTTCGATCGGGCCCAATGTGCTCATGGTTCACAAAAGAAGCCACACT
 GGAGAACGGCCCTCCAGTGCAATCAGTGCAGGCGCTCATTACCCAGAAGGGCAACCTGCTCCGGCACA
 TCAAGTGCATTCGGGGAGAAGCCCTTCAAATGCCACCTCTGCAACTACGCTGCCGCCGAGGGACGC
 CCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAAACCTCACAATGTGGATATTGTGGCCGAGCTAT
 AAACAGCGAAGCTCTTTAGAGGAACATAAAGAGCGCTGCCACAACCTACTTGGAAAGCATGGGCTTCCGG
 GCACACTGTACCCAGTCATTAAGAAGAACTAATCACAGTGAATGGCAGAAGACCTGTGCAAGATAGG
 ATCAGAGAGATCTCTCGTGTGGACAGACTAGCAAGTAACGTGCGCAAACGTAAGAGCTCTATGCCTCAG
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 GCGCCCGCTGGTGCAGACGCCCGGGCGGTTCCGAGTGGTCCCGGTCATCAGCCCGATGTACCAGCTG
 CACAAGCCGCTCGCGGAGGGCACCCCGCTCCAACACTCGGCCAGGACAGCGCCGTGGAGAACCTGC
 TGCTGCTCTCAAGGCCAAGTTGGTGCCTCGGAGCGGAGGCGTCCCGAGCAACAGCTGCCAAGACTC
 CACGGACACCGAGAGCAACAACGAGGAGCAGCGCAGCGGTCTCATCTACCTGACCAACACATCGCCCCG
 CACGCGCAACGGCTGTGCTCAAGGAGGAGCACCGCGCTACGACCTGCTGCGCGCCGCTCCGAGA
 ACTCGCAGGACGCGCTCCGCGTGGTCCAGCAGCGGGGAGCAGATGAAGGTGTACAAGTGCGAACACTG
 CCGGGTCTCTTCTGGATCACGTATGTACACCATCCACATGGGCTGCCACGGCTTCCGTGATCTTTT
 GAGTGCAACATGTGCGGCTACCACAGCCAGGACCGGTACGAGTTCTGTCGCACATAACGCGAGGGGAGC
 ACCGCTTCCACATGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213207 representing NM_006060
 Red=Cloning site Green=Tags(s)

MDADEGQDMSQVSGKESPPVSDTPDEGDEPMPPIPEDLSTTSGGQQSSKSDRVVASNVKIVETQSDEENGRA
 CEMNGEECAEDLRMLDASGEKMNGSHRDQSSALSGVGGIRLPNGKPKCDICGIIICIPNVLMVHKRSHT
 GERPFQCNQCGASFTQKGNLLRHIKLHSGEKPFKCHLCNYACRRRDALTGHLRTHSVGKPHKCGYGRSY
 KQRSSLEEHEKCHNYLESMLPGTLYPVIKEETNHSEMAEDLCKIGSERSLVLDRLASNVAKRKSMPQ
 KFLGDKGLSDTPYDSSASYEKENEMMKSHVMDQAINNAINYLAGESLRPLVQTPPGGSEVVPVISPMYQL
 HKPLAEGTSPSNHSAQDSAVENLLLLSKAKLVPSEREASPSNSCQDSTDTESNNEEQRSGLIYLTNHIAP
 HARNGLSLKEEHAYDLLRAASENSQDALRVVSTSGEQMKVYKCEHCRVLFLDHVMYTIHMGCHGFRDPF
 ECNMCGYHSQDRYEFSSHITRGEHRFHMS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8024_g09.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


- ACCN:** NM_006060
- ORF Size:** 1557 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.
- RefSeq:** [NM_006060.6](#)
- RefSeq Size:** 3962 bp
- RefSeq ORF:** 1560 bp
- Locus ID:** 10320
- UniProt ID:** [Q13422](#)
- Cytogenetics:** 7p12.2

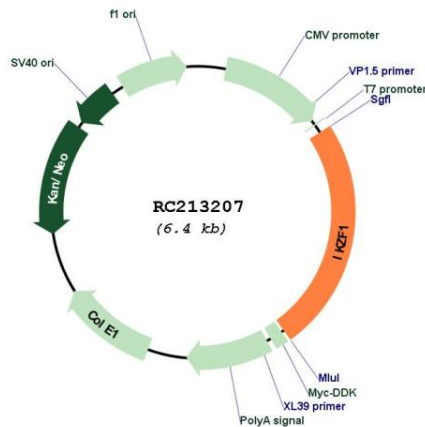
Domains: zf-C2H2

Protein Families: Druggable Genome, Transcription Factors

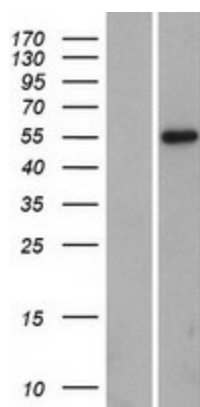
MW: 57.3 kDa

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]

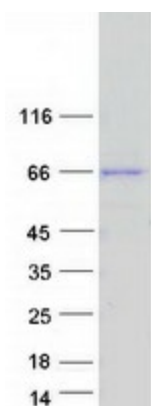
Product images:



Circular map for RC213207



Western blot validation of overexpression lysate (Cat# [LY416893]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213207 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IKZF1 protein (Cat# [TP313207]). The protein was produced from HEK293T cells transfected with IKZF1 cDNA clone (Cat# RC213207) using MegaTran 2.0 (Cat# [TT210002]).