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

Product datasheet for RC218858

HSPA14 (NM_016299) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSPA14 (NM_016299) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSPA14
Synonyms:	HSP70-4; HSP70L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC218858 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCCATCGGAGTTCACCTGGGCTGCACCTCAGCCTGTGTGGCCGTCTATAAGGATGGCCGGGCTG
GTGTGGTTGCAAATGATGCCGGTGACCGAGTTACTCCAGCTGTTGTTGCTTACTCAGAAAATGAAGAGAT
TGTTGGATTGGCAGCAAAACAAAGTAGAATAAGAAATATTTCAAATACAGTAATGAAAGTAAAGCAGATC
CTGGGCAGAAGCTCCAGTGATCCACAAGCTCAGAAATACATCGCGGAAAGTAAATGTTTAGTCATTGAAA
AAAATGGGAAATTACGATATGAAATAGATACTGGAGAAGAAACAAAATTTGTTAACCCAGAAGATGTTGC
CAGACTGATATTTAGTAAAATGAAAGAAACGGCACATTCTGTATTGGGCTCAGATGCAAATGATGTAGTT
ATTACTGTCCCGTTTGATTTTGGAGAAAAGCAAAAAAATGCTCTTGGAGAAGCAGCTAGAGCTGCTGGAT
TTAATGTTTTGCGATTAATTCACGAACCGTCTGCAGCTCTTCTTGCTTATGGAATTGGACAAGACTCCCC
TACTGGAAAAAGCAATATTTTGGTGTTTAAGCTTGGAGGAACATCCTTATCTCTCAGCGTCATGGAAGTT
AACAGTGGAATATATCGGGTTCTTTCAACAAACACTGATGATAACATCGGTGGTGCACATTTCACAGAAA
CCTTAGCACAGTATCTAGCTTCTGAGTTCCAAAGATCCTTCAAACATGATGTGAGAGGAAATGCGCGAGC
CATGATGAAATTAACGAACAGTGCTGAAGTAGCGAAACATTCTTTGTCAACCTTGGGAAGTGCCAACTGT
TTTCTTGACTCATTATATGAAGGTCAAGATTTTGATTGCAATGTGTCCAGAGCAAGATTTGAACTTCTTT
GTTCTCCACTTTTTAATAAGTGTATAGAAGCAATCAGAGGACTCTTAGATCAAAATGGATTTACAGCAGA
TGATATCAACAAGGTTGTCCTTTGTGGAGGGTCTTCTCGAATCCCAAAGCTACAGCAACTGATTAAAGAT
CTTTTCCCAGCTGTTGAGCTTCTCAATTCTATCCCTCCTGATGAAGTGATCCCTATTGGTGCAGCTATAG
AAGCAGGAATTCTTATTGGGAAAGAAAACCTGTTGGTGGAAGACTCTCTTATGATAGAGTGTTCAGCCAG
AGATATTTTAGTTAAGGGTGTGGACGAATCAGGAGCCAGTAGATTCACAGTGCTGTTTCCATCAGGGACT
CCTTTGCCAGCTCGAAGACAACACACATTGCAAGCCCCTGGAAGCATATCTTCAGTGTGCCTTGAACTCT
ATGAGTCTGATGGGAAGAACTCTGCCAAAGAGGAAACCAAGTTTGCACAGGTTGTACTCCAGGATTTAGA
TAAAAAAGAAAATGGATTACGTGATATATTAGCTGTTCTTACTATGAAAAGGGATGGATCTTTACATGTG
ACATGCACAGATCAAGAAACTGGAAAATGTGAAGCAATCTCTATTGAGATAGCATCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218858 protein sequence
Red=Cloning site Green=Tags(s)

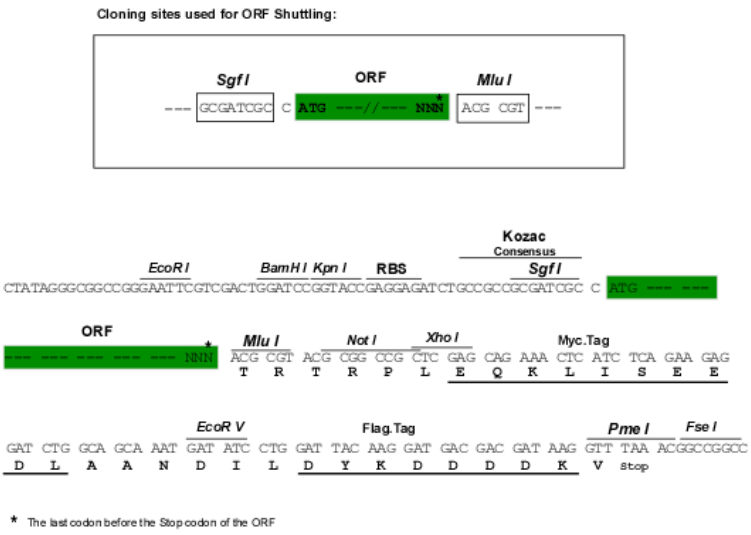
MAAIGVHLGCTSACVAVYKDGRAGVVANDAGDRVTPAVVAYSENEEIVGLAAKQSRIRNISNTVMKVKQI
LGRSSSDPQAQKYIAESKCLVIEKNGKLRYEIDTGEETKFVNPEDVARLIFSKMKETAHSVLGSDANDVV
ITVPFDFGEKQKNALGEAARAAGFNVLRLIHEPSAALLAYGIGQDSPTGKSNILVFKLGGTSLSLSVMEV
NSGIYRVLSTNTDDNIGGAHFTETLAQYLASEFQRSFKHDVRGNARAMMKLTNSAEVAKHSLSTLGSANC
FLDSLYEGQDFDCNVSRARFELLCSPLFNKCIEAIRGLLDQNGFTADDINKVVLCGGSSRIPKLQQLIKD
LFPAVELLNSIPPDEVIPIGAAIEAGILIGKENLLVEDSLMIECSARDILVKGVDESGASRFTVLFPSGT
PLPARRQHTLQAPGSISSVCLELYESDGKNSAKEETKFAQVVLQDLDKKENGLRDILAVLTMKRDGSLHV
TCTDQETGKCEAISIEIAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6562_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016299

ORF Size: 1527 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_016299.4

RefSeq Size: 1921 bp

RefSeq ORF: 1530 bp

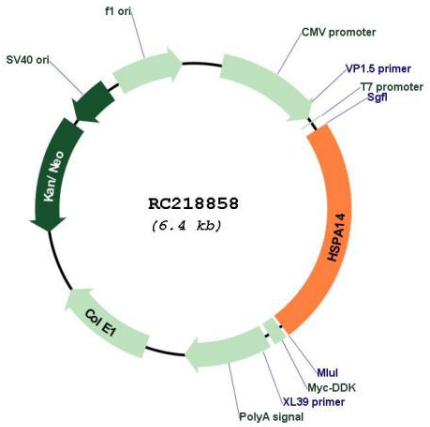
Locus ID: 51182

UniProt ID: Q0VDF9

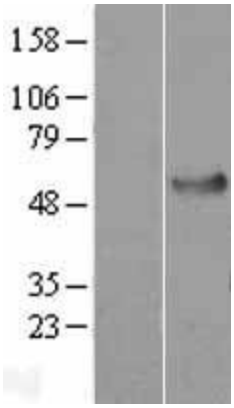
Cytogenetics: 10p13

Domains:	HSP70
Protein Families:	Druggable Genome, Stem cell - Pluripotency
MW:	54.8 kDa
Gene Summary:	Component of the ribosome-associated complex (RAC), a complex involved in folding or maintaining nascent polypeptides in a folding-competent state. In the RAC complex, binds to the nascent polypeptide chain, while DNAJC2 stimulates its ATPase activity.[UniProtKB/Swiss-Prot Function]

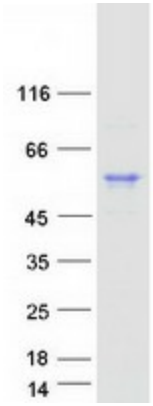
Product images:



Circular map for RC218858



Western blot validation of overexpression lysate (Cat# [LY414070]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218858 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSPA14 protein (Cat# [TP318858]). The protein was produced from HEK293T cells transfected with HSPA14 cDNA clone (Cat# RC218858) using MegaTran 2.0 (Cat# [TT210002]).