

## Product datasheet for **SC302568**

### **DNAJB14 (NM\_001031723) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNAJB14 (NM_001031723) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNAJB14
Synonyms:	EGNR9427; PRO34683
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC302568 representing NM_001031723. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG  
 GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**  
 ATGGAGGGGAACAGGGATGAGGCTGAGAAATGTGTGAGATCGCCCGGGAGGCCCTGAACGCCGGCAAC  
 CGCGAGAAGGCCAGCGCTTCTGCAGAAGGCCGAGAAGCTCTACCCACTGCCCTCGGCCGCGCACTA  
 TTGGAAATAATTATGAAAAATGGAAGCACGGCTGGAAATAGCCCTCATTGCCGAAAACCATCAGGTAGT  
 GGCGATCAAAGCAAGCCTAATTGCACAAAGGACAGCACATCTGGTAGTGGTGAAGGTGGAAAGGCTAT  
 ACCAAAGACCAAGTAGATGGAGTTCTCAGCATAAACAAATGTAAAAATTACTATGAAGTACTTGGAGTT  
 ACGAAAGATGCTGGTGATGAAGATTTGAAAAAGCTTATAGAAAGCTTGCTTTGAAGTTTCATCCAGAC  
 AAAAACCATGCACCTGGAGCAACAGATGCTTTTAAAAAGATTGGAAATGCTTATGCTGTTTTAAGTAAT  
 CCAGAAAAGCGAAAACAGTATGACCTCACGGGCAATGAAGAACAAGCATGTAACCACCAAAAACAATGGC  
 AGATTTAATTTCCATAGAGGTTGTGAAGCTGATATACTCCAGAAGACTTGTTTAAATATATTTTTGGG  
 GGTGGATTTCTTCAGGTAGTGATACATTCTTTTCAAATGGAAGAGCTGGTTATAGCCAACAACATCAG  
 CATCGACATAGTGACATGAAAGAGAAGAGGAAAGAGGAGATGGAGGTTTTCTGTGTTTATCCAGCTG  
 ATGCCATAATTGTATTGATCCTCGTGTCATTATTAAGCCAGTTGATGGTCTCTAATCCTCCTTATTCC  
 TTATATCCAGATCTGGAACCTGGGCAAACTATTAATGCAAAACAGAAAACCTTGGGTGTTGTTTATTAT  
 GTCACAAAGGACTTCAAAAATGAATATAAAGGAATGTTATTACAAAAGGTAGAAAAGAGTGTGGAGGAA  
 GATTATGTGACTAATATTCGAAATAACTGCTGGAAAGAAAGACAACAAAAACAGATATGCAGTATGCA  
 GCAAAAGTATACCGTGATGATCGACTCCGAAGGAAGGCAGATGCCTTGAGCATGGACAACGTAAAGAA  
 TTAGAGCGGCTTACAGTCTTTATAAAGGAGGA**TGA**  
**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT  
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI


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<b>ACCN:</b>	NM_001031723
<b>Insert Size:</b>	1140 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	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.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_001031723.3</a></u>
<b>RefSeq Size:</b>	6088 bp
<b>RefSeq ORF:</b>	1140 bp
<b>Locus ID:</b>	79982
<b>UniProt ID:</b>	<u><a href="#">Q8TBM8</a></u>
<b>Cytogenetics:</b>	4q23
<b>MW:</b>	42.5 kDa

**Gene Summary:**

Acts as a co-chaperone with HSPA8/Hsc70; required to promote protein folding and trafficking, prevent aggregation of client proteins, and promote unfolded proteins to endoplasmic reticulum-associated degradation (ERAD) pathway (PubMed:24732912). Acts by determining HSPA8/Hsc70's ATPase and polypeptide-binding activities (PubMed:24732912). Can also act independently of HSPA8/Hsc70: together with DNAJB12, acts as a chaperone that promotes maturation of potassium channels KCND2 and KCNH2 by stabilizing nascent channel subunits and assembling them into tetramers (PubMed:27916661). While stabilization of nascent channel proteins is dependent on HSPA8/Hsc70, the process of oligomerization of channel subunits is independent of HSPA8/Hsc70 (PubMed:27916661). When overexpressed, forms membranous structures together with DNAJB12 and HSPA8/Hsc70 within the nucleus; the role of these structures, named DJANGOs, is still unclear (PubMed:24732912).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.