

## Product datasheet for **SC312719**

### ZFAND1 (NM\_024699) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Tag:** Tag Free  
**Symbol:** ZFAND1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PSI00001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >SC312719 representing NM\_024699.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGAGTTGGACATCGGGCAGCACTGCCAGGTGGAGCATTGCCGGCAGCGAGATTTCTTCCATTT
GTGTGTGATGATTGTTAGGAATATTTGCCTTGAACACAGAAGCAGGGAGTCTCATGGTTGTCCTGAG
GTGACTGTAATCAATGAGAGACTGAAGACAGATCAACATACATCTTACCCATGCTCTTCAAAGACTGT
GCTGAGAGAGAAGTTGTGGCAGTTATATGTCCTTATTGTGAGAAGAATTTTGCCTGAGACACCGTCAT
CAGTCAGATCATGAGTGTGAAAACTGGAATCCCAAAGCCTCGAATGGCTGCCACTCAGAACTTGTT
AAAGACATTATTGATTCCAAGACAGGAGAAACAGCAAGTAAACGATGGAAAGGTGCCAAAAATAGTGAA
ACAGCTGCAAAGGTTGCATTGATGAAATTAAGATGCATGCTGATGGCGATAAGTCATTACCACAGACA
GAAAGAATTTACTTTAGGTTTTCTTACCTAAAGGGAGCAAAGAGAAGAGCAAACCAATGTTCTTTTGC
CACCGATGGAGCATTGAAAGGCCATAGACTTTGCCGCTTCTAGCCAGGCTTAAAAATGACAATAAC
AAATTTACAGCTAAGAAATTAAGGCTGTGTCACATTACTTCAGGAGAAGCCTTACCCTTGGATCATACT
TTGGAAACCTGGATTGCTAAGGAGGATTGTCCTTATATAATGGTGGAAATATAATCTTGAATATCTT
AATGATGAAGAACAATTCTGTAATAATGTTGAATCTTACTTGGAAATAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_024699  
**Insert Size:** 807 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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_024699.2</a>
<b>RefSeq Size:</b>	2210 bp
<b>RefSeq ORF:</b>	807 bp
<b>Locus ID:</b>	79752
<b>UniProt ID:</b>	<a href="#">Q8TCF1</a>
<b>Cytogenetics:</b>	8q21.13
<b>Domains:</b>	ZnF_AN1
<b>MW:</b>	30.8 kDa

**Gene Summary:**

Plays a role in the regulation of cytoplasmic stress granules (SGs) turnover. SGs are dynamic and transient cytoplasmic ribonucleoprotein assemblies important for cellular protein homeostasis when protein production is suspended after acute exogenous stress (PubMed:29804830). Associates with SGs and is involved in the efficient and specific arsenite-induced clearance process of SGs through the recruitment of the ubiquitin-selective ATPase VCP and the 26S proteasome (PubMed:29804830). This process requires both complexes for efficient degradation of damaged ubiquitinated SG proteins during recovery from arsenite stress, and hence avoiding aberrant cytoplasmic SGs degradation via autophagy (PubMed:29804830).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longest isoform (α).