

## Product datasheet for **RC224347**

### ZNF451 (NM\_015555) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF451 (NM_015555) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZNF451
Synonyms:	COASTER; dj41711.1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC224347 representing NM_015555 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGGAGACCCGGGTCCGGAGATAATAGAATCTGTCCCTCCAGCTGGCCCTGAGGCATCTGAGTCAACAA  
CGGATGAAAATGAAGACGACATTCAGTTTGTCACTGAAGGACCATTACGACCTGTTCTTGAATACATTGA  
TCTGGTCAGCAGTGATGATGAAGAGCCTAGCACCTTTACTGATGAGAATATTAACGTAAGGACCAT  
ATTGATTATCAGAAGGATAAAGTTGCTTTAACTCTGGCTCGTCTAGCCCGCCATGTTGAAGTGGAGAAAC  
AGCAGAAAAGAAGAGAAGAAATAGAGCATTAGAGAAAAAATTTGATTTTCAGCATGCTCATGGGTTACAAGA  
ATTGGAATTTATTCGAGGACATTCGTATACAGAAGCAGCAAGACTGTGTGTGGACCAAGTGGCTAAAAATG  
CCAGGACTCAAAACAGGCACAATTAATTGTGGAACAAAAGTTTCATTCCGAAGAGGAGGCCACACGTGGG  
TGTCTGGGAAACCAATTTATGTCCTATAATGCACTGTAACAAGGAGTTTGACAATGGGCACCTTCTCTT  
AGGACATTTGAAAAGGTTTCGATCACTCTCCATGTGATCCAACAATTACACTACATGGACCTTTCTCAGC  
TCCTTTGCTTGTGTAGTATGTTATAAAAAATTTGTTACTCAACAACAATATAGAGATCACCTTTTGGATA  
AGGAAGCCACAGATGATGGACATAACAACAACCTTCTTCCCTCAGATTATTCAGTGTTCATGATGCCAAA  
TTGCTTCTTCTTTTAGCAGAAAAGGAGGAGTTCAAAGCATATGTCCTGGAAAGAATCATTTCATCAG  
AGTTTCAAACCTGGGTGATAACAAAGGAATTGCACATCCAATATCTTTCCATCTTTTGCAAGAAAATTT  
TGATCTCTGTGCAAGATGTTCCCTTCAAGTTAAGTGTGTGGCCTGCCACAAGACACTGCGTCCCA  
CATGGAGCTCACTGCCATTTTCAGAGTTTATTGTCGAAATGCTGGACCTGTAGCTGTAGCTGAGAAGAGC  
ATTACCCAGGTTGCAGAGAAATTCATATTAAGAGGTTATTGTCCAGATTGCAATCAAGTCTTTGTGGATG  
AAACCAGCACCAAAATCATAAGCAGAATTCAGGACACAAAGTCCGAGTCATTAAGTCAAGTCTTTGTGGATG  
AGTCTTACTCTATTGCCACAGCAGCGAAGGGAACAAGGATCCTTCTTCTGACTTGCATTTATTGTTGGAT  
CAATCAAAATTTTCATCACTTAAAAGAACCATGTCTATTAAGAATCTAGCTCACTGGAGTGCATTGCCA  
TTCCAAAAAGAAGATGAATTTAAAAGATAAAAGCCATGAAGGTGTTGCTTGTGTCCAGAAAAGAAAATC  
AGTAGTTAAAACCTGGTTCTGTGAATGCAATCAGCGATTCCCAAGTGAAGATGCAGTAGAAAAGCATGTT  
TTCTCAGCAAAACAATGGGTTATAAATGTGTGGTCTGTGGAAAGGTATGTGATGATTCAGGGGTCAATC



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GTTTACACATGAGCCGGATTACGGAGGGGCACATTTAAATAACTTTCTTTTCTGGTGTCGGACATGCAA  
 AAAGGAGTTAACAAGGAAAGATACTATCATGGCACATGTGACTGAATTCATAATGGACACAGATATTTT  
 TATGAGATGGATGAGGTAGAAGGTGAACTTTGCCATCATCTCTACAACATTGGATAATTTGACTGCTA  
 ACAAGCCTTCATCAGCTATTACTGTTATTGATCATTCCCCGGCAAATAGTTCTCCGAGGGGTAATGGCA  
 ATGCCGGATTTGTGAAGATATGTTTGATTCCCAGGAATATGTAAAACAGCACTGCATGTCTTTGGCAAGC  
 CACAAGTTTCATAGATACAGCTGTGCTCACTGCAGAAAGCCTTTTCATAAGATAGAAACATTGTACCGCAG  
 ATTGCCAAGATGAGCATGACAATGAGATAAAGATTAATACTTCTGTGGGCTTTGTGATCTTATCTTTAA  
 TGTGGAAGAAGCATTCTTGAGTCATTATGAGGAGCACCACAGCATAGATTATGTATTTGTGTCAGAAAAA  
 ACTGAAACTTCAATTAACCGAAGATGATTTTCCAGTAATAGAGACCAGTAACCGTTAACTTGTGGTT  
 GCCGTGAGAGTTACATCTGTAAGTCAACAGAAAAAGAAGATTATAGCAGATGTCTCCAAATCATGCTGGA  
 TAAAGGAAAAGTGTGGTTTCGCTGCAGTTTATGTTTCGGCAACAGCACAGAAATTAACCGACATGAACACT  
 CATATCCATCAAGTGCACAAAGAAAAGAGTGATGAGGAGGAGCAGCAGTATGTAATCAAGTGTGGCACCT  
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 GAGAGAAAAGTGAACAGGCAATAAACTATTCAAAAAGTTTAGACATGGAGAAAGGAGTTGAGAATGACC  
 TAAGCTATCAGAATATAGGAGGAAACCAATTGGAAGCCTCCGCTCAACTGTAAGATTTATAACTACCT  
 GAACAGGATTGGATGCTTCTTCCCTCATCTCGCTGTAGTAAAAGAAAAGATGCTGCTGATTTTGCATA  
 TGTATGCATGCTGGCCGTCTAGATGAACAACACCAAGCAAATTCCTTTACCATCCTCTCAGGAGATC  
 AAGGTTTTCTGGAGCTAGAGAATCAATTTAAGAAGACTCAGAGGCCAGCTCATATACTAAACCTCACCA  
 CTTAGAGGGAGATATGATGTGTGCCTTGTAAATAGCATATCTGATACCACCAAAGAATGTGACAGTGAT  
 GATAACATGGGTGCCAAAAATACTTCAATAGGAGAAGAATTTATCCACAGAAGATGTGGAATTAGAAG  
 AAGCTATTAGAAGAAGTCTTGAGGAAATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATGAGTTTAA

**Protein Sequence:**

>RC224347 representing NM\_015555  
 Red=Cloning site Green=Tags(s)

MGDPGSEIIESVPPAPGEASESTTDENEDDIQFVSEGPLRPVLEYIDLVSDDDEEPSTSYDENIKRKDH  
 IDYQKDKVALTLARLARHVEVEKQKKEKNRAFREKIDFQHAHGLQLEFIRGHSDTEAARLCVDQWLKM  
 PGLKTGTINCGTKSSFRRGGHTWVSGKPIILCPIMHCNKEFDNGHLLLGLHFKRFDHSPCDPTITLHGPFSS  
 SFACVVCYKKFVTQQQYRDHLDKEATDDGHNLLPQIIQCFACPNCFLLFSRKEECSKHMSGKNHFHQ  
 SFKLGDNKGIAHPISFSPFAKLLISLCKDVPFQVKVACHKTLRSHMELTAHFRVHCRNAGPVAVAES  
 ITQVAEKFILRGYCPDCNQVFVDETSTQNHKQNSGHKVRVINSVEESVLLYCHSSEGNKDPSSDLHLLLD  
 QSKFSSLKRTMSIKESSLEICAIIPKKMNLKDKSHEGVACVQKEKSVVKTWFCECNQRFPSEDAIVEKHV  
 FSANTMGYKCVCGKVCDDSGVIRLHMSRIHGG AHLNNFLFWCRTCKKELTRKDTIMAHVTEFHNGHRYF  
 YEMDEVEGETLPSSSTLNDLTANKPSSAITVIDHSPANSSPRGWQCRICEDMFDQSQYVYKQHCMSLAS  
 HKFHRYSCAHCRCRPFHKIETLYRHCQDEHDNEIKIKYFCGLCDLIFNVEEAFLSHYEEHHSIDYVVFSEK  
 TETSIKTEDDFPVIETSQNLTCGCRESYICKVNRKEDYSRCLQIMLDKGKLFWRCSLCSATAQNL TDMNT  
 HIHQVHKEKSDEEEQQYVIKCGTCTKAFHDPEAQQHFHRKHCFLLQKPSVAHFGSEKSNLYKFTASASHT  
 ERKLLKQAINYSKSLDMEKGVENDLSYQNI GGNTNWKPLNCKIYNYLNRIGCFFLHPRCSKRKDAADF AI  
 CMHAGRLDEQLPKQIPFTILSGDQGFLELENQFKKTQRP AHILNPHHLEGDMMCALLNSISDTTKECDS  
 DNMGAKNTSIGEEFISTEDVELEEAIIRRSLEEM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul



<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_015555.2</a></u> , <u><a href="#">NP_056370.2</a></u>
<b>RefSeq Size:</b>	5097 bp
<b>RefSeq ORF:</b>	3042 bp
<b>Locus ID:</b>	26036
<b>UniProt ID:</b>	<u><a href="#">Q9Y4E5</a></u>
<b>Cytogenetics:</b>	6p12.1
<b>Domains:</b>	zf-C2H2
<b>Protein Families:</b>	Transcription Factors
<b>MW:</b>	115.6 kDa
<b>Gene Summary:</b>	E3 SUMO-protein ligase; has a preference for SUMO2 and SUMO3 and facilitates UBE2I/UBC9-mediated sumoylation of target proteins (PubMed:26524493, PubMed:26524494). Plays a role in protein SUMO2 modification in response to stress caused by DNA damage and by proteasome inhibitors (in vitro). Required for MCM4 sumoylation (By similarity). Has no activity with SUMO1 (PubMed:26524493). Preferentially transfers an additional SUMO2 chain onto the SUMO2 consensus site 'Lys-11' (PubMed:26524493). Negatively regulates transcriptional activation mediated by the SMAD4 complex in response to TGF-beta signaling. Inhibits EP300-mediated acetylation of histone H3 at 'Lys-9' (PubMed:24324267). Plays a role in regulating the transcription of AR targets (PubMed:18656483).[UniProtKB/Swiss-Prot Function]