

Product datasheet for **RG232971**

ZNF451 (NM_001257273) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF451 (NM_001257273) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZNF451
Synonyms:	COASTER; dj41711.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG232971 representing NM_001257273
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGAGACCCGGGGTCGGAGATAATAGAATCTGTCCCTCCAGCTGGCCCTGAGGCATCTGAGTCAACAA
 CGGATGAAAATGAAGACGACATTCAGTTTGTCAAGGACCATTACGACCTGTTCTTGAATACATTGA
 TCTGGTCAGCAGTGATGATGAAGAGCCTAGCACCTTATACTGATAGAATGCCTGAATCTAAGGTGCCA
 TCCTCTGAGAATCATCGCCAGAAATGTGCTCTAGCTGCAATGTTCTCTCCCATTGGAGATAGCAGCT
 CCTTCTCTGGGAGTTGTTCCAGCAGTCCAGAAAGGATAGTTTCTCAAACCTCCTCTGTTGAGAACCATT
 GGAGAACCAGAAAAATGATCAAAATAATTCAGATACTAAGATCTCTGAGACAGAGACCCTTAAATCATCA
 CAGAATTTTCAGACTCTGCCTTCATCTCCACTTCTGGTCCCCAAGAATCTTTGGCCTCTCTGAGGTCA
 AAGAGAATTTACGTATAGATTCTTCTTCAGCTTACAGCATGGACGGGATGCCATCCTCTATCTCCAGAC
 ACAAGTAGCTGAAATGTCCCAGTGATACGTGATCTGCAGTCCAGGAGCTGTTTTAGATTTATCATTCT
 AGGCCAAGTGAGAACTCCTCAGTTCCTTGGGACATCTCCACCTCTAAAGAGGAAAAATTTATCCACAGTTG
 AAGAAGAACTGATTACAATCACCATCAGCTGATGACAAAGGGCAGCCATCTGACCCCAGCCAATCTAG
 TTTACAGGTCTTTTGAAGAGAATGGAACAAAGAGGTGTATAAAAAGGGTGACATTACAATCTGAAGCG
 GAGTCATGTGAAGGAAACCTGATTGTGTGACTTCTAAAAACGTTTGGTTCCCTCCATTGCATCCTCTTC
 TGAGAATTGCCACCCTGAGGTTTTTAAAGACCCTGCTGATTGCCATCCTTCTTCTTATGGGACACAG
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 GCATTAGAACACAGCAAAAGAGGAAACACAACATCCCCTCTAGATTCTACCTCAAAGAAATGGAGGTCA
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 ATATCAGCGTAACTCTGGGAAGACATGGAAGATCTGGTTCATGACCCAGAATTTGATCGTGAAAAGCA
 AGATGCATAATATCTGATGGTATGGATGCAAGCCTTTGGCAACTTTGTACTACTAGGGACATAATGGACT
 CTGTAGTCAGAGTTATGGCCATGGCCATAGACTATAGACGGCAGGCCTGGCTTCGACTTACATCTCTCAC
 TAAGAAAACCCAGGAGAAGATCTCCCACTTGCCTTTGATGGTACTTCCCTTTTTGGACAAGATGTGAAA
 GCTGTTGTTGCAGAAGACAACAATATAAAAGAAAATGACTATAAAGATCACAATACTATAATCAGCATC
 GATACTTTTATAGTCATGATCAGAAAGCACATTATCACAATAGAGGATACTCAAAGGGGATTGGTACAA
 ACCTCGAAACCACCCCTATAGATATAGAAAAGAGGAGACTCTCCAGAACGCCATGGGTACAAGAAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG232971 representing NM_001257273
 Red=Cloning site Green=Tags(s)

MGDPGSEIIESVPPAGPEASESTTDENEDDIQFVSEGPLRPVLEYIDLVSDDDEEPSTSYTDRMPESKVP
 SSENHRPEMCSSCNVPLPIGDSSSFSGSCSSPERIVSQTSSVENPLENQKNDQNNSDTKISETETLKSS
 QNFQTLPSPLLVPQESLASSEVKENLRIDSSASQHGDRDAILYLQTQVAEMSRVIRDLQSRSCFRFHHS
 RPESSSVPWDISTSKENLSTVEEETDYKSPSADDKQSPDPSQSSFTGLLKRMEQRGVIKRVTLQSEA
 ESCEGKPDVCVTSKKRLVPPLHPLLRIATTEVFKDPADCHPSSFMGHRVYPVAKDTSFPQPNPAEGPIVE
 ALEHSKRGNTTSPLDSTSKEMEVMGCRFYHAASIAARAASYMAYMTQYQRKLWEDMEDLVHDPEFDRGKA
 RCIIISDGMADGLWQLCTTRDIMDSVVRVMAMIDYRRQAWLRLTSLTKKTQEKISHLPFDGTSLFGQDVK
 AVVAEDNNIKENDYKDHKYYNQHRFYFSDQKAHYHNRGYSKGDWYKPRNHPYRKRKGGDSPERHGYKN

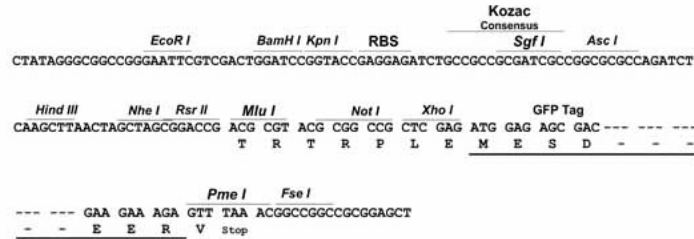
TRTRPLE – GFP Tag – V

Restriction Sites:

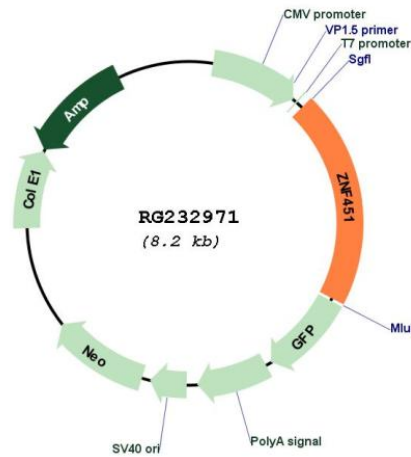
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:	NM_001257273
ORF Size:	1677 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:	<ol style="list-style-type: none">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_001257273.2
RefSeq Size:	9558 bp
RefSeq ORF:	1680 bp
Locus ID:	26036
Cytogenetics:	6p12.1
Protein Families:	Transcription Factors
Gene Summary:	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]