

## Product datasheet for **MC223398**

### Zfp451 (NM\_133817) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Zfp451 (NM\_133817) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Zfp451  
**Synonyms:** 4930515K21Rik; 4933435G09Rik; AI596398; COASTER; Kiaa0576-hp; mKIAA1702; Znf451  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC223398 representing NM\_133817  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGGAGACCCAGGGCCGGAGATAATAGAATCTGTCCACCAGCTGGGCCGAGGCATCAGAGTCTACCA  
CGGATGAAACGAAGATGACATTCAGTTTGTAGTGAAGGACCGTTAAGACCCGTTTTGGAATACATTGA  
TCTAGTCAGCAGTGATGATGAAGAGCCTAGTACCTCTCACAGTGATGAGAATTTAAATGCAAAAGACTAT  
ATAGATCACCAGAAGGATAAAGTTGCTTTAACTTTGGCTCGCCTGGCCCGCCATGTTGAAGTAGAAAAAC  
AACAGAAAAGAAGAGAAGAACAGGGCATTAGGGAAAAAATTGATTTTCAGCACGCTCATGGTTTACAAGA  
GTTGGAGTTTATCAAGGACATTCAGAAACAGAAGCAGCAAGACAGTGTGTGGACCAAGTGGCTAAAAATG  
CCAGGACTCAGAACAAATGCAGCTAATTCGGAACAAAAAGATCATTCCAACGTGGAGGCAGGATGTGGA  
GGTCTGAGAAGCCAATTTGTGTCCTATAATGCACTGTAACAAGGAATTTGACAATGGGCACCTTCTGTT  
GGGACATTTGAAAAGTTTGATCACTCCCATGTGATCCCAATTACGTTACATGGACCTCTGGCTAAT  
TCGTTTGCATGTGCAGTGTGCTATGAACATTCGTTACTCAACAGCAGTACAAGGACCATCTTCTCCA  
GGACAGCTGCAGCCGATGGACATAGCAATAGCCTTCTTCTCAGATTATCAATGTTATGCTTGTCCACA  
GTGCTTCTTTTGTAGCACCAAGGATGAGTGTGTTGAAGCATATGTCTACAAAGAATCATTTCATCAG  
AGCTTTAAACTGAGTGATAATAAAGGAACGGCCCGCCCAATATCATTTCATCTTTTGCAAGAAGCGTT  
TGGTCTCTGTGCAAAGATGTTCCATTCAGGTTAAGTGTGTGGCCTGCCACCAGACTCTGCGTCTCA  
CATGGAGCTCACTGCCATTTCCAGGGTTCGTTGTCAAAATGCTGGACCTGTTGCTATAGCTGAAAAAAGC  
ATTACTCAGTTGCAAAAGAATTCATAGTAAGAGGTTATTGTTTCAAGTTCAGATTGCAACCAGGTCTTTATGGATG  
TAGCCAGCACCCAAAGTCACAAGAATTCAGGACACAAAATTACACTTGCGAAGTCCGGTGGAAAGAATCTGT  
CTTGCTTTATTGCCACATCAGTGAAGGGAGTCGGCCTCCTGTGATTTACATTTATTTAGTCAACCAAAA  
ATTTCACTAATAACCGATTCTGTCCGTTAAAGAGTCCAGTGCAGAGGATTGTATCGTTCCGACAAAGA  
AGGTGAACTTAGGTGTTGAAAGCCTTGGAGGTGCAACTCGTGTGAGAGGCAGAGTCCAGCAGTCAAGC  
CTGGTTTTGTGAATGCAGACGGCAGTTTCCAGTGAAGAGGCGGTAGAAAAGCATGTTTTCTCGGCAAAC  
ACAATGTGTTATAAGTGTGTGGTCTGTGAAAGGTTTGTGAAGATTCGGGGTTCATGCGTTTACACATGA



GCCGGTTTCATGGAGGGGCGCATTAAATAACTTTCTATTTTGGTGTCCGACGTGCAAAAAGGAGTTAGT  
 AAAGAAAGATGCCATCATGGCACACATTACTGAGTTTCATAGTGGGCATAGATATTTTTATGAGATGGAT  
 GAGGTAGAGGAGGAAGAGGAGGAGGCCATGCCGTCATCCTCTGTGGAGAGCCATTTGAATACTGACAAAC  
 CTCCTTCACCCATTGCTGTTGTTGATCACTGCCCGCCAACAGTCCTCCCAGGGGAGGTGGCAGTGCCG  
 CATCTGTGAGGACATGTTTGAATCCCAGGAGTGTGTGAAGCAGCACTGCATGTCTTGACAAGCCACCGG  
 TTTACAGATACAGCTGTGCCACTGCAGAAAGACTTTCCATAAAGTGGAAACTGTACCGACATTGCC  
 AGGACGAGCATGACAGTGAGATCATGATGAAGTACTTCTGTGGGCTTTGTGATCTCATTTTTAACAAAGGA  
 AGAAGAATTTCTGAGTCACTATAAGGAACACCACAGCATAGATTATGTGTTTGTGTCAGAAAAAACTAAA  
 ACCTCAATTA AAACTGAAGGCGATTTTAAAATAGTAGAGACCAGTAGTTACTAAGCTGTGGCTGTCATG  
 AGAGTTACATGTGTA AAAATCAACAGAAAGGAAGACTATGACCGATGCCTTCCAGTCTGTGGAGAAAGG  
 TAGGCTGTGGTTTCGCTGCAGCTCGTGCTCAGCCACAGCACAGAATGTGACCGACATTAACACTCACGTC  
 TGCCAAGTGCACAGAAAAGAGAAAAGTGAAGGAGCAGCAGTATGTGATCAAGTGTGGCATCTGCACCA  
 AGGCATTCAGAACACGGAGAGCGCTCAGCAGCACTTCCACAGGAAGCACGGCCCTCCAGAAACCCAC  
 CGGACCCAGGGGGAGCCAACAGAAAGCAGCACATGCCAGCTGGTGCTAGTGCCTCACATGCTGAGAAA  
 AACCTGAAACAGCTAGCTCTCAGAAACATTAGACGTGAAAAAGGAGCTGAGCATGATGTACGCTGCC  
 AGAACATAGAGGAGGAAGTTGAGCTCCGGATGTGGACTACCTGCGGACCATGACTCACATAGTCTTTGT  
 AGATTTTGATAACTGGTCCAAC TTTTTGGTCATCTACCTGGGCATCTTAAATCAAGGAACGTTTATTTGG  
 GGCTTTCAAGGGGAAACCAACTGGAAGCCCCGCTCAGCTGTAAGGTCTATAATTACTTGAGCAGGA  
 TTGGCTGCTTCTTCCTTCATCCTCGCTGCAGTAAAAGAAAAGATGCCGCGGATTTTGCCATATGTATGCA  
 TGCTGGCCGTCTAGATGAGCAACTTCCCAAACAATTCCTTTCACCATCCTCTCGGGAGACCAAGGCTTT  
 CTGGAGCTAGAGAATCAATTTAAGAAGCCAGAGGCCAGCTCATATACTAAACCCTCACCATTAGAGG  
 GAGACATGATGTGTGCCTTGTAAATAGCATATCTGATACTACCAAAGAGTGTGACAGTGACGATAGCTC  
 GGGGATGAAAGGATCTCCAGCAGAGGAGCTCAGGGCCACGGAGGATGTGGAATTAGAAGAAGCTATTAGA  
 AGAAGTCTTGAGGAGATGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-MluI
- ACCN:** NM\_133817
- Insert Size:** 3171 bp
- OTI Disclaimer:** 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).
- 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\\_133817.3](#), [NP\\_598578.1](#)
- RefSeq Size:** 4030 bp

RefSeq ORF: 3171 bp

Locus ID: 98403

UniProt ID: [Q8C0P7](#)

Cytogenetics: 1 12.81 cM

**Gene Summary:** E3 SUMO-protein ligase; has a preference for SUMO2 and SUMO3 and facilitates UBE2I/UBC9-mediated sumoylation of target proteins. 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. Has no activity with SUMO1 (PubMed:26524493). Preferentially transfers an additional SUMO2 chain onto the SUMO2 consensus site 'Lys-11'. 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'. Plays a role in regulating the transcription of AR targets (By similarity).[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).