

## **Product datasheet for MC207538**

## Terf2ip (NM\_020584) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Terf2ip (NM 020584) Mouse Untagged Clone

Tag: Tag Free
Symbol: Terf2ip
Synonyms: Rap1

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC207538 representing NM\_020584

Red=Cloning site Blue=ORF Orange=Stop codon

AAGACGGCAGCGCCATGTCGTTTTACGTGCGGCCCAGCTCGGCCAAGCGCCGGCTGTCGACGCTCATCCT GCACGGCGGCGCACCGTGTGTCGGGTGCAGGAACCCGGAGCCGTGCTTCTCGCCCAGCCCGGGGAGGCG CTGGCCGAGGCTTCGGGCGACTTCATCTCCACGCAGTACATCCTAGACTGCGTGGATCGCAACGAGAAGC TGGACCTGGAGGCCTATCGGCTGGGCCTGACGGAGCAGGCGTCCGATCCGAAGCCCGGGGCTTCCACCGA GGGCTCCACGGAACCGGAGCCGCAGCCCCTGACCGGGCGCATCGCCTACACCGACGCGGAAGATGTGGCC ATCCTGACCTACGTGAAGGAGAACGCCCGTTCGCCCAGCTCGGTCACAGGCAATGCCTTGTGGAAAGCGA TGGAGAAGAGCTCGCTCACGCAGCACTCCTGGCAGTCGCTCAAGGACCGCTACCTCAAGCACCTACGGGG TCAGGAGCACAAGTACCTGCTCGGGAACGCCCCGGTCAGCCCGTCCTCCCAGAAGCTCAAACGGAAGGCG GAGCAGGACCCCGAGGCCGCGGATAGCGGAGAGCCACAGAACAAGAGAGCGCCAGACTTGCCTGAGGAGG AGTGTGTGAAAGGAGATCAAGGAGAATGGAGAGGCAGACAACAAGCTGTTTGAGGAAGCCGCTCCGGA GTTCGGAGAAGCCGTGGTGGATGAGAGCCCTGACTTTGAAATACATATAACGATGTGTGATGGTGATCCA CCCACACCCGAGGAAGACTCAGAAACACAGCCAGACGAGGAGGAAGAAGAACCAAAAGTTTCTACGCAAG AAGTGGGAACTGCCATTAAGGTGATCCGGCAGCTAATGGAGAAGTTCAACTTGGATCTATCAACAGTTAC ACAGGCCTTGCTGAAGAACAGTGGTGAGCTGGAGGCCACGTCCTTCTTAGAGTCGGGGCGGAGACCC GACGGTTATCCCATTTGGTGCAGACAAGATGACTTAGATTTGCAGAAGGACGATGACGACACGAAAAATG 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

## Terf2ip (NM\_020584) Mouse Untagged Clone - MC207538

**ACCN:** NM\_020584

**Insert Size:** 1182 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: <u>NM 020584.2, NP 065609.2</u>

 RefSeq Size:
 3599 bp

 RefSeq ORF:
 1182 bp

 Locus ID:
 57321

 UniProt ID:
 Q91VL8

Cytogenetics: 8 E1

**Gene Summary:** Acts both as a regulator of telomere function and as a transcription regulator. Involved in the

regulation of telomere length and protection as a component of the shelterin complex (telosome). In contrast to other components of the shelterin complex, it is dispensible for telomere capping and does not participate in the protection of telomeres against non-homologous end-joining (NHEJ)-mediated repair. Instead, it is required to negatively regulate telomere recombination and is essential for repressing homology-directed repair (HDR), which can affect telomere length. Does not bind DNA directly: recruited to telomeric double-stranded 5'-TTAGGG-3' repeats via its interaction with TERF2. Independently of its function in telomeres, also acts as a transcription regulator: recruited to extratelomeric 5'-TTAGGG-3' sites via its association with TERF2 or other factors, and regulates gene expression. When cytoplasmic, associates with the I-kappa-B-kinase (IKK) complex and acts as a regulator of the NF-kappa-B signaling by promoting IKK-mediated phosphorylation of RELA/p65, leading to

activate expression of NF-kappa-B target genes.[UniProtKB/Swiss-Prot Function]