

## Product datasheet for **RG229652**

### TESC (NM\_001168325) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** TESC (NM\_001168325) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** TESC  
**Synonyms:** CHP3; TSC  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG229652 representing NM\_001168325  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCGTGCCCACTCCGCTGTGAGGAGGTGCGGGAGCTCGAGGGCAAGACCGGCTTCTCATCGGATC  
 AGATCGAGCAGCTCCATCGGAGATTTAAGCAGCTGAGTGGAGATCAGCCTACCATTCCGAACCTGCGCAA  
 GGGACCCAGTGGCTGGCTGATGAGATCAATTTGAGGACTTCTGACCATCATGTCTACTTCCGGCCC  
 ATCGACACCACCATGGACGAGGAACAGGTGGAGCTGTCCCGAAGGAGAAGCTGAGATTTCTGTTCCACA  
 TGTACGACTCGGACAGCGACGGCCGCATCACTCTGGAAGAATATCGAAATGTGGTCGAGGAGCTGCTGTC  
 GGGAAACCCTCACATCGAGAAGGAGTCCGCTCGCTCCATCGCCGACGGGGCCATGATGGAGCGGCCAGC  
 GTGTGCATGGGGCAGATGGAGCCTGATCAGGTGTACGAGGGGATCACCTTCGAGGACTTCTGAAGATCT  
 GGCAGGGGATCGACATTGAGACCAAGATGCACGTCGCTTCTTAACATGGAAACCATGGCCCTCTGCCA  
 C

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG229652 representing NM\_001168325  
 Red=Cloning site Green=Tags(s)

MGAHSAEEVRELEGKTFSSDQIEQLHRRFKQLSGDQPTIRNLRKGPGLADEINFEDFLTIMSYFRP  
 IDTTMDEEQVELSRKEKLRFLFHMYSDDSDGRITL E EYRNVVEELL SGNPHIEKESARSIADGAMMEAS  
 VCMGQMEPDQVYEGITFEDFLKIWQID IETKMHVRF LNMETMALCH

**TRTRPLE** - GFP Tag - V

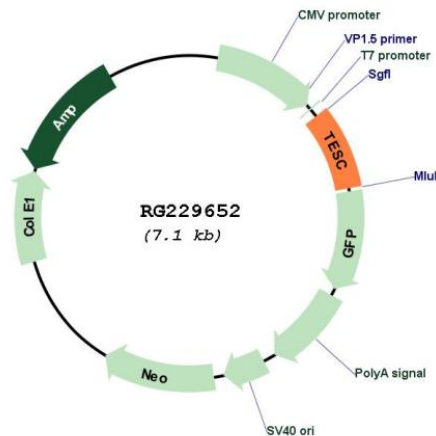
**Restriction Sites:** Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM\_001168325

ORF Size: 561 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:**

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\\_001168325.1](#), [NP\\_001161797.1](#)

**RefSeq Size:** 958 bp

**RefSeq ORF:** 564 bp

**Locus ID:** 54997

**UniProt ID:** [Q96BS2](#)

**Cytogenetics:** 12q24.22

**Gene Summary:** Functions as an integral cofactor in cell pH regulation by controlling plasma membrane-type Na(+)/H(+) exchange activity. Promotes the maturation, transport, cell surface stability and exchange activity of SLC9A1/NHE1 at the plasma membrane. Promotes the induction of hematopoietic stem cell differentiation toward megakaryocytic lineage. Essential for the coupling of ERK cascade activation with the expression of ETS family genes in megakaryocytic differentiation. Also involved in granulocytic differentiation in a ERK-dependent manner. Inhibits the phosphatase activity of calcineurin.[UniProtKB/Swiss-Prot Function]