

Product datasheet for **RC222650**

TESC (NM_017899) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TESC (NM_017899) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TESC
Synonyms: CHP3; TSC
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC222650 representing NM_017899
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGCTGCCACTCCGCTCTGAGGAGGTGCGGGAGCTCGAGGGCAAGACCGGCTTCTCATCGGATC
AGATCGAGCAGCTCCATCGGAGATTTAAGCAGCTGAGTGGAGATCAGCCTACCATTGCAAGGAGAACTT
CAACAATGTCCCGGACCTGGAGCTCAACCCATCCGATCCAAAATTGTTCTGTCCTTCTCGACAACAGG
AACCTGCGCAAGGGACCCAGTGGCTGATGAGATCAATTTGAGGACTTCTGACCATCATGTCCT
ACTTCCGGCCATCGACACCACCATGGACGAGGAACAGGTGGAGCTGTCCGGAAGGAGAAGCTGAGATT
TCTGTTCCACATGTACGACTCGGACAGCGACGGCCGATCACTCTGGAAGAATATCGAAAATGTGGTCGAG
GAGCTGTGTGCGGAAACCCTCACATCGAGAAGGAGTCCGCTCGCTCCATCGCCGACGGGCCATGATGG
AGGCGGCCAGCGTGTGCATGGGGCAGATGGAGCCTGATCAGGTGTACGAGGGGATCACCTTCGAGGACTT
CCTGAAGATCTGGCAGGGGATCGACATTGAGACCAAGATGCACGTCCGCTTCCTAACATGGAAACCATG
GCCCTCTGCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222650 representing NM_017899
Red=Cloning site Green=Tags(s)

MGAAHSAEEVRELEGKTFSSDQIEQLHRRFKQLSGDQPTIRKENFNNVPDLELNPIRSKIVRAFFDNR
 NLRKGPGLADEINFEDFLTIMSYFRPIDTTMDEEQVELSRKEKLRFLFHMYSDDSDGRITL E EYRNVVE
 ELLSGNPHIEKESARSIADGAMMEAASVCMQMEPDQVYEGITFEDFLKIWQID IETKMHVRF LNMETM
 ALCH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8040_g07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017899

ORF Size: 642 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_017899.4](#)

RefSeq Size: 1025 bp

RefSeq ORF: 645 bp

Locus ID: 54997

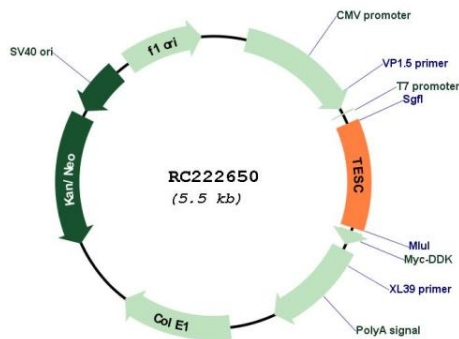
UniProt ID: [Q96BS2](#)

Cytogenetics: 12q24.22

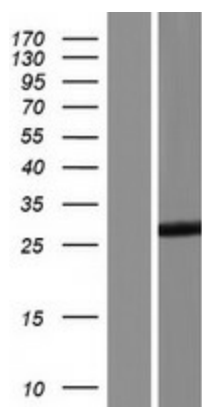
MW: 24.6 kDa

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]

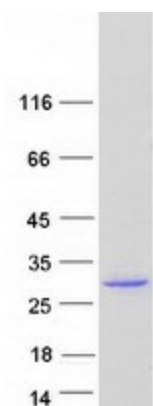
Product images:



Circular map for RC222650



Western blot validation of overexpression lysate (Cat# [LY413481]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222650 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TESC protein (Cat# [TP322650]). The protein was produced from HEK293T cells transfected with TESC cDNA clone (Cat# RC222650) using MegaTran 2.0 (Cat# [TT210002]).