

Product datasheet for RC227210

TEF (NM_001145398) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK

Symbol: TEF

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC227210 representing NM_001145398

Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC}$

CAAGTGCAAGACCATCGTGTCCAAGTATGAGACCAAATACGGGCCCTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG**GTTTAA**



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Protein Sequence: >RC227210 representing NM_001145398

Red=Cloning site Green=Tags(s)

MDMPEVLKSLLEHSLPWPEKRTDKEKGKEKLEEDEAAAASTMAVSASLMPPIWDKTIPYDGESFHLEYMD LDEFLLENGIPASPTHLAHNLLLPVAELEGKESASSSTASPPSSSTAIFQPSETVSSTESSLEKERETPS PIDPNCVEVDVNFNPDPADLVLSSVPGGELFNPRKHKFAEEDLKPQPMIKKAKKVFVPDEQKDEKYWTRR KKNNVAAKRSRDARRLKENQITIRAAFLEKENTALRTEVAELRKEVGKCKTIVSKYETKYGPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8048_e08.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



CTATAGGGCGGCCGG	EcoR I			HI Kp		RB		-crgc	Co	nsensu Sg	fl	c 🖪	TG -		
ORF	* Miu i							Xho I			-	.Tag			
	1	NNN AC		r acg	R	P	L	GAG E	CAG Q	K K	L	ATC I	TCA S	GAA E	GAG E
	EcoR V	/ Flag.Tag				ag	9				Pme i		Fse I		
D L A A	N AAT	D I	CTG L	GAT D	TAC Y	AAG K	GAT D	GAC D	GAC D	GAT D	AAG K	GTT V	TAA Stop	ACGG	caggaa

^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001145398

ORF Size: 819 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).

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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um

filter is required.

RefSeq: <u>NM_001145398.2</u>, <u>NP_001138870.1</u>

RefSeq ORF: 822 bp

Locus ID: 7008

UniProt ID: Q10587

Cytogenetics: 22q13.2

Protein Families: Transcription Factors

MW: 30.5 kDa

Gene Summary: This gene encodes a member of the PAR (proline and acidic amino acid-rich) subfamily of

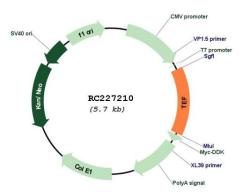
basic region/leucine zipper (bZIP) transcription factors. It is expressed in a broad range of cells and tissues in adult animals, however, during embryonic development, TEF expression appears to be restricted to the developing anterior pituitary gland, coincident with the appearance of thyroid-stimulating hormone, beta (TSHB). Indeed, TEF can bind to, and transactivate the TSHB promoter. It shows homology (in the functional domains) with other members of the PAR-bZIP subfamily of transcription factors, which include albumin D box-binding protein (DBP), human hepatic leukemia factor (HLF) and chicken vitellogenin gene-binding protein (VBP); VBP is considered the chicken homologue of TEF. Different members of the subfamily can readily form heterodimers, and share DNA-binding, and transcriptional regulatory properties.

Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jan 2012]



Product images:



Circular map for RC227210