

Product datasheet for **KN217718**

TCF4 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	TCF4
Locus ID:	6925
Components:	<p>KN217718G1, TCF4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGAAAGAGGAGAGGCACCTG</p> <p>KN217718G2, TCF4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTTGACAAATTACTIONCAAAGA</p> <p>KN217718D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

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GGCTGTGTAT TAGAATTACT TGGGGAGATT TTTTAAATC TCAATGCCA AGCCACACTC CTAGACCAAT
TAATTTAGAA GTTCTTAGGA TGAGACTGAG ACATCGTTTT TTTTCTTTT TCTTTCTTTC TTTCTTTTTT
TTTTTAACCA TCCCAAGGTC TTTATTTATT TAGTTTATGC CTATCATGCC ATGAATTCAT GGGGAATAGA
TTCTAGCAGC TCGAGCTCCT TTTCTTTGGG TCTCAGAAAA TGTGCTTCTC TGGGCAGAGC AGGCTGGTTT
TTCGGTTGAA CCTAGATCCC TTTCTCTCG GCTTCTTCT TTTTCTGATC ATTTTCTCC TACCATTTC
GGATGCTATC TCAGCTCTTA GAGTGCTTAA TATGCTCAAT ATGTACATTA ATTCTCTTG CAAGAATCTT
TCTCTTATCT TGTTTGTTA CAACAATGCC AACAGCATGC TGGGTTACAC AGTAGACTCT TCCAGCTTTG
CCATGGTAAC ACTTGTGCAG CATTCTTTT CGAACAGTGC CCATTCTCTT GATGTCTACA GTATCACCTT
TCTTGTAGAT TGGCACTTAT GCGGCCAAG GAACAACACC AAAGCCAGCC ATCATTTTTT AAAACTTCTC
AGGACATTGT AACATGCACT TGGGTTGAGA ACTGCTACTC GAGCTTCTCC AGGAGGCCCT TGGAGGTAGG
AACCAGCATT TGGGCTACTT TAGCATCTTA GTAGAACTG AAACCAAAAA TGATCTCCCA TGGCCACCAT
GGCCAAACAT AACGGTAGT TCTAGCTCTC TAACCTCTCT CCCTGACATC TCCACAGCAC TTGGCCTGCC
CTCTTGAGAG TCTTTTCTTT TTTTCTTTT CTTTTCTTT TTTTTTTTTT AGACAGGGCC TCACTCTGTC
TCACAGGCTG GAGTGCAATG GCACATTCTT GGCTCACTGC AGCCTCTGCC TCCCGGTTT TAGCAATTCT
CATGCCTCAG CCTCCCAAGT AGCTGAGATT ACAGGCATGC ACCACAATGC CCGGCTAACT TCTGTATTTT
TAGTAGAGAC AGGGTTTTGC CATGTTGGTT GGGCTGGCCT CGAATTCTG ACTTCAAGTG ATCTGTCCAT
CTCGGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC CACGCATGGC CCTGCCTTCT TGAGATTCTT
GCTGAGACTG

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GE100003, scramble sequence in pCas-Guide vector



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Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_001083962](#), [NM_001243226](#), [NM_001243227](#), [NM_001243228](#), [NM_001243230](#), [NM_001243231](#), [NM_001243232](#), [NM_001243233](#), [NM_001243234](#), [NM_001243235](#), [NM_001243236](#), [NM_003199](#), [NM_001306207](#), [NM_001306208](#), [NM_001330604](#), [NM_001330605](#), [NM_001348211](#), [NM_001348212](#), [NM_001348213](#), [NM_001348214](#), [NM_001348215](#), [NM_001348216](#), [NM_001348217](#), [NM_001348218](#), [NM_001348219](#), [NM_001348220](#), [NM_001369567](#), [NM_001369571](#), [NM_001369574](#), [NM_001369577](#), [NM_001369579](#), [NM_001369580](#), [NM_001369581](#), [NM_001369585](#), [NM_001369586](#), [NM_001369568](#), [NM_001369569](#), [NM_001369570](#), [NM_001369572](#), [NM_001369573](#), [NM_001369575](#), [NM_001369576](#), [NM_001369578](#), [NM_001369582](#), [NM_001369583](#), [NM_001369584](#)

UniProt ID:

[P15884](#)

Synonyms:

bHLHb19; E2-2; ITF-2; ITF2; PTHS; SEF-2; SEF2; SEF2-1; SEF2-1A; SEF2-1B; SEF2-1D; TCF-4

Summary:

This gene encodes transcription factor 4, a basic helix-loop-helix transcription factor. The encoded protein recognizes an Ephrussi-box ('E-box') binding site ('CANNTG') - a motif first identified in immunoglobulin enhancers. This gene is broadly expressed, and may play an important role in nervous system development. Defects in this gene are a cause of Pitt-Hopkins syndrome. In addition, an intronic CTG repeat normally numbering 10-37 repeat units can expand to >50 repeat units and cause Fuchs endothelial corneal dystrophy. Multiple alternatively spliced transcript variants that encode different proteins have been described. [provided by RefSeq, Jul 2016]

Product images:
