

# Recombinant Human TCF3

**Cat. No.** TCF3-29462TH    **Lot. No.** (See product label)

## SPECIFICATION

**Product Overview**      Recombinant fragment corresponding to amino acids 545-654 of Human TCF3 / E2A with an N terminal proprietary tag; Predicted MWt 37.73 kDa.

**Species**                      Human

**Source**                        Wheat Germ

**ProteinLength**              110 amino acids

**Description**

This gene encodes a member of the E protein (class I) family of helix-loop-helix transcription factors. E proteins activate transcription by binding to regulatory E-box sequences on target genes as heterodimers or homodimers, and are inhibited by heterodimerization with inhibitor of DNA-binding (class IV) helix-loop-helix proteins. E proteins play a critical role in lymphopoiesis, and the encoded protein is required for B and T lymphocyte development. Deletion of this gene or diminished activity of the encoded protein may play a role in lymphoid malignancies. This gene is also involved in several chromosomal translocations that are associated with lymphoid malignancies including pre-B-cell acute lymphoblastic leukemia (t(1;19), with PBX1), childhood leukemia (t(19;19), with TFPT) and acute leukemia (t(12;19), with ZNF384). Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the short arm of chromosome 9.

**Molecular Weight**        37.730kDa inclusive of tags

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Form</b>	Liquid
<b>Purity</b>	Proprietary Purification
<b>Storage buffer</b>	pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
<b>Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
<b>Sequences of amino acids</b>	EREKERRVANNARERLRVRDINEAFKELGRMCQLHLNSEK PQTKLLILHQAVSVILN LEQQVRERLNLPKAAACKLRREEE KVSGVVGDPQMVLSPHPGLSEAHNPAGHM
<b>Sequence Similarities</b>	Contains 1 basic helix-loop-helix (bHLH) domain.

## GENE INFORMATION

<b>Gene Name</b>	TCF3 transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47) [ Homo sapiens ]
<b>Official Symbol</b>	TCF3
<b>Synonyms</b>	TCF3; transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47); transcription factor E2-alpha; bHLHb21; E2A; E2A immunoglobulin enhancer binding factor E12/E47; E47; immunoglobulin transcription factor 1; ITF1; kappa E2 binding factor;
<b>Gene ID</b>	6929
<b>mRNA Refseq</b>	NM_001136139

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Protein Refseq</b>	NP_001129611
<b>MIM</b>	147141
<b>Uniprot ID</b>	P15923
<b>Chromosome Location</b>	19p13.3
<b>Pathway</b>	CDO in myogenesis, organism-specific biosystem; Delta-Notch Signaling Pathway, organism-specific biosystem; Developmental Biology, organism-specific biosystem; HTLV-I infection, organism-specific biosystem; HTLV-I infection, conserved biosystem;
<b>Function</b>	DNA binding; contributes_to DNA binding; DNA binding; E-box binding; contributes_to E-box binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA