



TCF3 blocking peptide (CDBP6246)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen 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. [provided by RefSeq, Sep 2011]

Conjugate

Unconjugated

Applications

Used as a blocking peptide in immunoblotting applications.

Format

Liquid

Concentration

200 µg/mL

Size

0.05 mg

Preservative

None

Storage

-20°C

GENE INFORMATION

Gene Name

[TCF3 transcription factor 3 \[Homo sapiens \(human\) \]](#)

Official Symbol	TCF3
Synonyms	TCF3; transcription factor 3; E2A; E47; ITF1; VDIR; TCF-3; bHLHb21; transcription factor E2-alpha; kappa-E2-binding factor; VDR interacting repressor; transcription factor ITF-1; helix-loop-helix protein HE47; transcription factor 3 variant 3; immunoglobulin transcription factor 1; vitamin D receptor-interacting repressor; class B basic helix-loop-helix protein 21; negative vitamin D response element-binding protein; transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)
Entrez Gene ID	6929
mRNA Refseq	NM_001136139
Protein Refseq	NP_001129611
UniProt ID	P15923
Pathway	CDO in myogenesis; Delta-Notch Signaling Pathway; Developmental Biology; HTLV-I infection; Id Signaling Pathway; Myogenesis; Notch-mediated HES/HEY network; Regulation of nuclear SMAD2/3 signaling
Function	DNA binding; contributes_to DNA binding; DNA binding; E-box binding; contributes_to E-box binding; contributes_to E-box binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in negative regulation of transcription; bHLH transcription factor binding; chromatin binding; enhancer binding; mitogen-activated protein kinase kinase kinase binding; protein binding; protein heterodimerization activity; protein heterodimerization activity; protein heterodimerization activity; protein homodimerization activity; repressing transcription factor binding; contributes_to sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; sequence-specific DNA binding transcription factor activity; transcription coactivator activity; transcription factor binding; contributes_to transcription regulatory region DNA binding; vitamin D response element binding