

## Summary

<b>Production Name</b>	TCF-4/12 Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	TCF4/TCF12
<b>Alternative Names</b>	TCF4; BHLHB19; ITF2; SEF2; Transcription factor 4; TCF-4; Class B basic helix-loop-helix protein 19; bHLHb19; Immunoglobulin transcription factor 2; ITF-2; SL3-3 enhancer factor 2; SEF-2; TCF12; BHLHB20; HEB; HTF4; Transcription factor 12;
<b>Gene ID</b>	6925/6938
<b>SwissProt ID</b>	P15884/Q99081.The antiserum was produced against synthesized peptide derived from human TCF4/12. AA range:581-630

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. ELISA: 1:20000
<b>Molecular Weight</b>	60kD

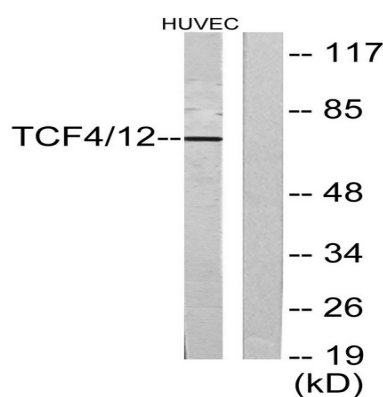
## Background

This gene encodes transcription factor 4, a basic helix-loop-helix transcription factor. The encoded protein recognizes an E-box (&apos;E-box&apos;) binding site (&apos;CANNTG&apos;) - 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],disease:Defects in TCF4 are a cause of Pitt-Hopkins syndrome (PTHS) [MIM:610954],disease:Haploinsufficiency of TCF4 is a cause of Pitt-Hopkins syndrome (PTHS) [MIM:610954]. PTHS is a rare syndromic encephalopathy characterized by severe psychomotor delay, epilepsy, daily bouts of diurnal hyperventilation starting in infancy, mild postnatal growth retardation, postnatal microcephaly, and distinctive facial features. Since most hitherto reported cases have been sporadic, with males and females equally affected, PTHS is regarded as an autosomal dominant condition.,function:Transcription factor that binds to the immunoglobulin enhancer Mu-E5/KE5-motif. Binds to the E-box present in the somatostatin receptor 2 initiator element (SSTR2-INR) to activate transcription (By similarity). Preferentially binds to either 5'-ACANNTGT-3' or 5'-CCANNTGG-3',,sequence caution:Incomplete and probable erroneous sequence.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,subunit:Efficient DNA binding requires dimerization with another bHLH protein. Forms homo- or heterooligomers with myogenin. Interacts with HIVEP2.,tissue specificity:Expressed in adult heart, brain, placenta, skeletal muscle and to a lesser extent in the lung. In developing embryonic tissues, expression mostly occurs in the brain.,

## Research Area

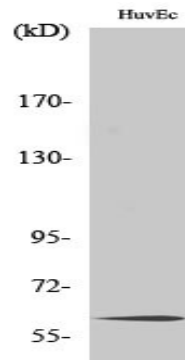
Stem cell pathway; Adherens\_Junction; WNT;WNT-T CELL;β-Catenin; Protein\_Acetylation

## Image Data



Western blot analysis of lysates from HUVEC cells, using TCF4/12 Antibody. The lane on the right is blocked with the synthesized peptide.

**Product Name: TCF-4/12 Rabbit Polyclonal Antibody**  
**Catalog #: APRab18736**



Western Blot analysis of various cells using TCF-4/12 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA) .

**Note**

For research use only.