



TCF-4/12 Polyclonal Antibody

Catalog No	YP-Ab-02091
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	TCF4/TCF12
Protein Name	Transcription factor 4/12
Immunogen	The antiserum was produced against synthesized peptide derived from human TCF4/12. AA range:581-630
Specificity	TCF-4/12 Polyclonal Antibody detects endogenous levels of TCF-4/12 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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;
Observed Band	60kD
Cell Pathway	Nucleus .
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.
Function	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-ISR) to activate transcription (By similarity). Preferentially binds to either 5'-ACANNTGT-3' or



5'-CCANNTGG-3'.,sequence caution:Incomplete and probable erro

Background

This gene encodes transcription factor 4, a basic helix-loop-helix transcription factor. The encoded protein recognizes an E-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],

matters needing attention

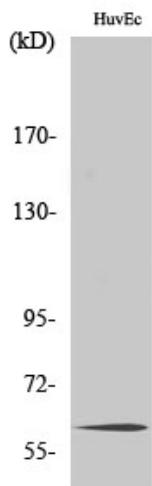
Avoid repeated freezing and thawing!

Usage suggestions

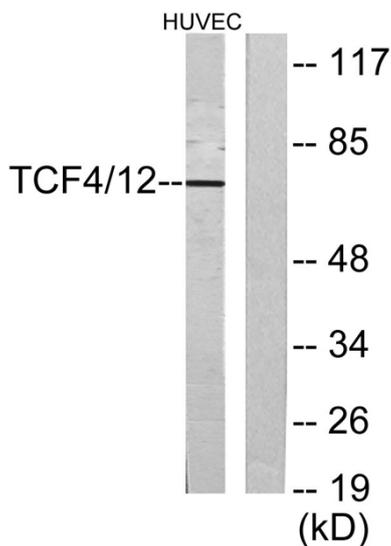
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



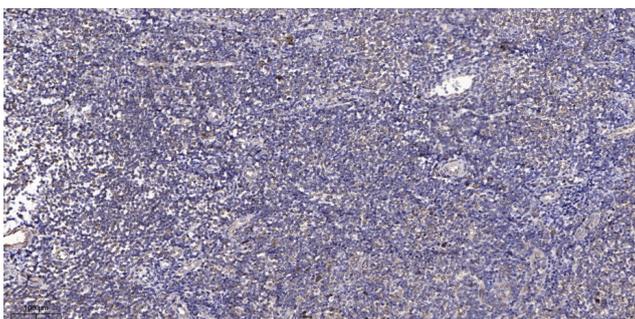
Products Images



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).



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



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).