

Product name:	TCF-4/12 Rabbit Polyclonal Antibody
Cat number:	ABN18736
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human TCF4/12. AA range:581-630
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	60kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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],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.,