

Immunotag™ TCF-4/12 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4580
Product Description	Immunotag™ TCF-4/12 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TCF-4/12
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from TCF-4/12, at AA range: 550-630
Specificity	TCF-4/12 Polyclonal Antibody detects endogenous levels of TCF-4/12 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	TCF4/TCF12
Accession No.	P15884/Q99081 Q62655/P51514
Alternate Names	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;

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Description	transcription factor 4(TCF4) Homo sapiens 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],
Cell Pathway/ Category	Stem cell pathway, Adherens_Junction, WNT,WNT-T CELL,β-Catenin, Protein_Acetylation
Protein Expression	Aorta endothelial cell,Skin fibroblast,Thymocyte,Thymus,
Subcellular Localization	nuclear chromatin,nucleus,transcription factor complex,
Protein 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-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 HIVP2.,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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.