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Goat Anti-TCF3 / ITF1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2073a

Specification

Goat Anti-TCF3 / ITF1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P15923
Other Accession	NP_003191, 6929
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**67600**

Goat Anti-TCF3 / ITF1 Antibody - Additional Information

Gene ID 6929

Other Names
Transcription factor E2-alpha, Class B basic helix-loop-helix protein 21, bHLHb21, Immunoglobulin enhancer-binding factor E12/E47, Immunoglobulin transcription factor 1, Kappa-E2-binding factor, Transcription factor 3, TCF-3, Transcription factor ITF-1, TCF3, BHLHB21, E2A, ITF1

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-TCF3 / ITF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-TCF3 / ITF1 Antibody - Protein Information

Name TCF3

Synonyms BHLHB21, E2A, ITF1

Function
Transcriptional regulator involved in the initiation of neuronal differentiation and mesenchymal to epithelial transition (By similarity). Heterodimers between TCF3 and tissue-specific basic helix-loop-helix (bHLH) proteins play major roles in determining tissue- specific cell fate during

embryogenesis, like muscle or early B-cell differentiation (By similarity). Together with TCF15, required for the mesenchymal to epithelial transition (By similarity). Dimers bind DNA on E-box motifs: 5'-CANNTG-3' (By similarity). Binds to the kappa-E2 site in the kappa immunoglobulin gene enhancer (PubMed:2493990). Binds to IEB1 and IEB2, which are short DNA sequences in the insulin gene transcription control region (By similarity).

Cellular Location
Nucleus.

Goat Anti-TCF3 / ITF1 Antibody - Protocols

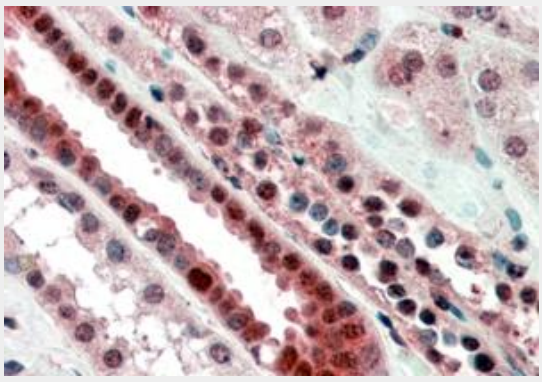
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-TCF3 / ITF1 Antibody - Images



AF2073a (0.01 µg/ml) staining of Daudi cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2073a (3.8 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-TCF3 / ITF1 Antibody - Background

The TCF3 gene, also called E2A, encodes 2 basic helix-loop-helix (bHLH) transcription factors, E12 and E47, through alternative splicing. E12 and E47 are involved in regulation of immunoglobulin gene expression (Bain et al., 1994 [PubMed 8001125]).

Goat Anti-TCF3 / ITF1 Antibody - References

Aberrant induction of LMO2 by the E2A-HLF chimeric transcription factor and its implication in leukemogenesis of B-precursor ALL with t(17;19). Hirose K, et al. Blood, 2010 Aug 12. PMID 20519628.
Impact of female cigarette smoking on circulating B cells in vivo: the suppressed ICOSLG, TCF3, and VCAM1 gene functional network may inhibit normal cell function. Pan F, et al. Immunogenetics, 2010 Apr. PMID 20217071.
Hedgehog signaling maintains hair follicle stem cell phenotype in young and aged human skin. Ritti L, et al. Aging Cell, 2009 Dec. PMID 20050020.
Calmodulin inhibition of E2A stops expression of surrogate light chains of the pre-B-cell receptor and CD19. Hauser J, et al. Mol Immunol, 2010 Feb. PMID 20022378.
Mixed lineage kinase phosphorylates transcription factor E47 and inhibits TrkB expression to link neuronal death and survival pathways. Pedraza N, et al. J Biol Chem, 2009 Nov 20. PMID 19801649.