

**GTF2H4 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP56227****Specification****GTF2H4 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q92759</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GTF2H4
Epitope Specificity	381-462/462
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus. Colocalizes with BTK in the cytoplasm.
SIMILARITY	Belongs to the TFII-I family. Contains 6 GTF2I-like repeats.
Post-translational modifications	Transiently phosphorylated on tyrosine residues by BTK in response to B-cell receptor stimulation. Phosphorylation on Tyr-248 and Tyr-398, and perhaps, on Tyr-503 contributes to BTK-mediated transcriptional activation. Sumoylated.
DISEASE	Note=GTF2I is located in the Williams-Beuren syndrome (WBS) critical region. WBS results from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-copy repeat sequences flanking the deleted region. Haploinsufficiency of GTF2I may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in the disease.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

TFII I is a ubiquitously expressed multifunctional transcription factor with broad biological roles in transcription and signal transduction in a variety of cell types. It has been shown that TFII I can interact physically and functionally with Btk (Bruton's tyrosine kinase), a hematopoietic

non-receptor protein tyrosine kinase that is critical for B lymphocyte development.

## **GTF2H4 Polyclonal Antibody - Additional Information**

**Gene ID** 2968

### **Other Names**

General transcription factor IIH subunit 4, Basic transcription factor 2 52 kDa subunit, BTF2 p52, General transcription factor IIH polypeptide 4, TFIIH basal transcription factor complex p52 subunit, GTF2H4

### **Target/Specificity**

Ubiquitous. Isoform 1 is strongly expressed in fetal brain, weakly in adult brain, muscle, and lymphoblasts and is almost undetectable in other adult tissues, while the other isoforms are equally expressed in all adult tissues.

### **Dilution**

IHC-P ~ ~ N/A  
IHC-F ~ ~ N/A  
IF ~ ~ 1:50 ~ 200  
ICC ~ ~ N/A  
E ~ ~ N/A

### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **GTF2H4 Polyclonal Antibody - Protein Information**

**Name** GTF2H4

### **Function**

Component of the general transcription and DNA repair factor IIH (TFIIH) core complex, which is involved in general and transcription-coupled nucleotide excision repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIH acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription.

### **Cellular Location**

Nucleus.

## **GTF2H4 Polyclonal 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 Cytometry](#)
- [Cell Culture](#)

#### **GTF2H4 Polyclonal Antibody - Images**