# TBP (D5G7Y) Rabbit mAb

**✓** 100 µl (10 western blots) Cell Signaling

**Orders** 877-616-CELL (2355)

orders@cellsignal.com

**Support** 877-678-TECH (8324)

info@cellsignal.com

Web www.cellsignal.com

New 07/13

## For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype	
W, IP, ChIP	H, Mk	38 kDa	Rabbit IgG**	

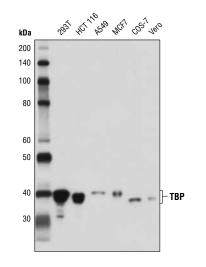
**Background:** TATA-binding protein (TBP) is a ubiquitously expressed nuclear protein that functions at the core of the general transcription factor protein complex TFIID (1-3). TFIID, which contains TBP and 13 TBP-associated factors (TAFs), contributes to the formation of the transcription pre-initiation complex, an assembly of multiple protein complexes (TFIIA, TFIIB, TFIIE, TFIIF, TFIIH, and RNA polymerase II) that bind to a gene promoter during the initiation of transcription (1-3). Once the pre-initiation complex is formed, RNA polymerase II becomes competent for elongation and transcribes the body of a gene. TBP functions in the recruitment of TFIID by binding to the TATA-box sequence found approximately 25 base pairs upstream of the transcription start site of many protein-coding genes. In addition, many transcriptional activator proteins interact with TBP and various TAF proteins to facilitate recruitment of TFIID and formation of the pre-initiation complex.

Specificity/Sensitivity: TBP (D5G7Y) Rabbit mAb recognizes endogenous levels of total TBP protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala110 of human TBP protein.

Chromatin immunoprecipitations were performed with cross-linked chromatin from 4 x 10° HeLa cells and either 10 µl of TBP (D5G7Y) Rabbit mAb or 2 µl of Normal Rabbit IgG #2729 using SimpleChIP® Enzymatic Chromatin IP Kit (Magnetic Beads) #9003. The enriched DNA was quantified by real-time PCR using SimpleChIP® Human γ-Actin Promoter Primers #5037, SimpleChIP® Human GAPDH Promoter Primers #4471 and SimpleChIP® Human lpha Satellite Repeat Primers #4486. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the total amount of

input chromatin, which is equivalent to one.



Western blot analysis of extracts from various cell lines using TBP (D5G7Y) Rabbit mAb.

Entrez Gene ID #6908 UniProt ID #P20226

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

## **Recommended Antibody Dilutions:**

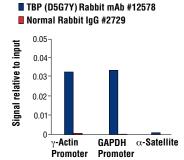
Western blotting	1:1000
Immunoprecipitation	1:50
Chromatin IP	1:50

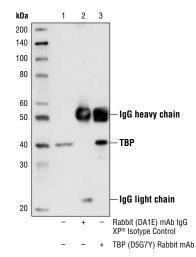
For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

### **Background References:**

- (1) Goodrich, J.A. and Tjian, R. (1994) Curr Opin Cell Biol 6,
- (2) Berk, A.J. (2000) Cell 103, 5-8.
- (3) Thomas, M.C. and Chiang, C.M. (2006) Crit Rev Biochem Mol Biol 41, 105-78.





Immunoprecipitation of TBP from HCT 116 cell extracts, using Rabbit (DA1E) mAb laG XP® Isotype Control #3900 (lane 2) or TBP (D5G7Y) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using TBP (D5G7Y) Rabbit mAb.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish

IF-Immunofluorescence

F-Flow cytometry E-P-ELISA-Peptide