

TAF1 (D6J8B) Rabbit mAb

✓ 100 µl
(10 western blots)



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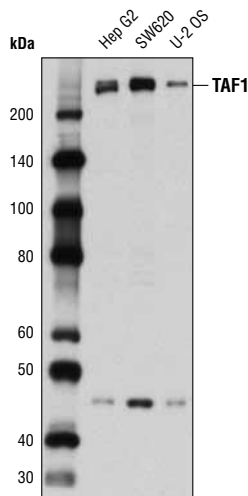
Applications W, IP Endogenous	Species Cross-Reactivity* H	Molecular Wt. 250 kDa	Isotype Rabbit IgG**
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Background: TATA-binding protein (TBP) is a ubiquitously expressed nuclear protein that functions at the core of the general transcription factor protein 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, TFIIIF, TFIIF, 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.

TBP-associated factor 1 (TAF1) is the largest subunit of TFIID and possesses multiple enzymatic activities including a protein kinase activity (4), a histone acetyltransferase activity (5) and both E1 and E2 ubiquitin-activating and conjugating activities (6,7). The target proteins of these enzymatic activities include both histones and non-histones and play a critical role in regulating transcription activation (3). In addition, TAF1 contains two tandem bromodomains that recognize acetylated histone H3 and histone H4 and are thought to promote the recruitment and association of TFIID at target promoters post activator recruitment of coactivators for gene expression (8,9).

Specificity/Sensitivity Key: TAF1 (D6J8B) Rabbit mAb recognizes endogenous levels of total TAF1 protein. This antibody also cross-reacts with protein of unknown origin at 45 kDa.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala1679 of human TAF1 protein.



Western blot analysis of extracts from Hep G2, SW620 and U-2 OS cells using TAF1 (D6J8B) Rabbit mAb.

Entrez Gene ID #6872
UniProt ID #P21675

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	1:100

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, 403-9.
- (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.
- (4) Dikstein, R. et al. (1996) *Cell* 84, 781-90.
- (5) Mizzen, C.A. et al. (1996) *Cell* 87, 1261-70.
- (6) Pham, A.D. and Sauer, F. (2000) *Science* 289, 2357-60.
- (7) Boutet, S.C. et al. (2010) *Mol Cell* 40, 749-61.
- (8) Jacobson, R.H. et al. (2000) *Science* 288, 1422-5.
- (9) Kanno, T. et al. (2004) *Mol Cell* 13, 33-43.

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 IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
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 B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.