

## **UBTF Antibody (monoclonal) (M03)**

Mouse monoclonal antibody raised against a partial recombinant UBTF. Catalog # AT4454a

## **Specification**

# **UBTF** Antibody (monoclonal) (M03) - Product Information

Application WB, IHC, IF, E **Primary Accession** P17480 Other Accession NM 014233 Human, Rat Reactivity Host mouse Clonality Monoclonal Isotype IgG1 Kappa Calculated MW 89406

## **UBTF Antibody (monoclonal) (M03) - Additional Information**

#### **Gene ID 7343**

## **Other Names**

Nucleolar transcription factor 1, Autoantigen NOR-90, Upstream-binding factor 1, UBF-1, UBFF, UBF, UBF1

## Target/Specificity

UBTF (NP\_055048, 551 a.a.  $\sim$  650 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

## **Dilution**

WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A

#### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

## **Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

### **Precautions**

UBTF Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

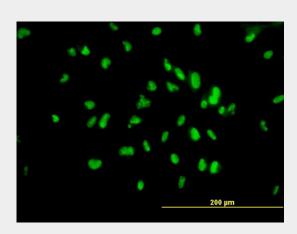
## **UBTF Antibody (monoclonal) (M03) - Protocols**

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

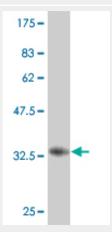


- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **UBTF Antibody (monoclonal) (M03) - Images**

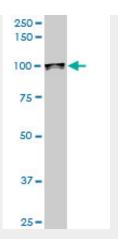


Immunofluorescence of monoclonal antibody to UBTF on HepG2 cell. [antibody concentration 10 ug/ml]

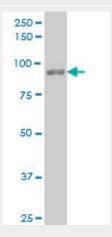


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen  $(36.74 \; \text{KDa})$ .

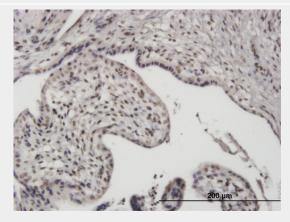




UBTF monoclonal antibody (M03), clone 1A2. Western Blot analysis of UBTF expression in PC-12((Cat # AT4454a))

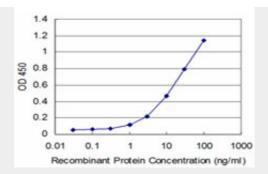


UBTF monoclonal antibody (M03), clone 1A2 Western Blot analysis of UBTF expression in HepG2 ( (Cat # AT4454a )



Immunoperoxidase of monoclonal antibody to UBTF on formalin-fixed paraffin-embedded human placenta. [antibody concentration 0.5 ug/ml]





Detection limit for recombinant GST tagged UBTF is approximately 1ng/ml as a capture antibody.

# **UBTF Antibody (monoclonal) (M03) - Background**

Upstream binding factor (UBF) is a transcription factor required for expression of the 18S, 5.8S, and 28S ribosomal RNAs, along with SL1 (a complex of TBP (MIM 600075) and multiple TBP-associated factors or 'TAFs'). Two UBF polypeptides, of 94 and 97 kD, exist in the human (Bell et al., 1988 [PubMed 3413483]). UBF is a nucleolar phosphoprotein with both DNA binding and transactivation domains. Sequence-specific DNA binding to the core and upstream control elements of the human rRNA promoter is mediated through several HMG boxes (Jantzen et al., 1990 [PubMed 2330041]).

## **UBTF Antibody (monoclonal) (M03) - References**

Molecular mechanisms underlying nucleocytoplasmic shuttling of actinin-4. Kumeta M, et al. J Cell Sci, 2010 Apr 1. PMID 20197409. Transcriptional corepressor TLE1 functions with Runx2 in epigenetic repression of ribosomal RNA genes. Ali SA, et al. Proc Natl Acad Sci U S A, 2010 Mar 2. PMID 20160071. Treacle recruits RNA polymerase I complex to the nucleolus that is independent of UBF. Lin CI, et al. Biochem Biophys Res Commun, 2009 Aug 21. PMID 19527688. Temperature-induced partially unfolded state of hUBF HMG Box-5: conformational and dynamic investigations of the Box-5 thermal intermediate ensemble. Liu Z, et al. Proteins, 2009 Nov 1. PMID 19452555. Nucleolar localization of upstream binding factor in HeLa cells depends on rRNA synthesis activities. He J, et al. Folia Biol (Praha), 2008. PMID 19393134.