

## ETF1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant ETF1. Catalog # AT1951a

#### Specification

## ETF1 Antibody (monoclonal) (M02) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E P62495 NM\_004730 Human mouse Monoclonal IgG2b Kappa 49031

## ETF1 Antibody (monoclonal) (M02) - Additional Information

Gene ID 2107

**Other Names** Eukaryotic peptide chain release factor subunit 1, Eukaryotic release factor 1, eRF1, Protein Cl1, TB3-1, ETF1, ERF1, RF1, SUP45L1

**Target/Specificity** ETF1 (NP\_004721.1, 338 a.a. ~ 437 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 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** ETF1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

#### ETF1 Antibody (monoclonal) (M02) - Protocols

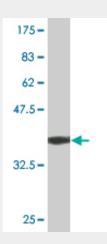
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides

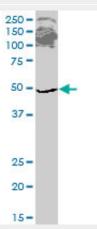


- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ETF1 Antibody (monoclonal) (M02) - Images

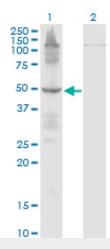


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



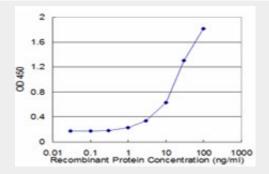
ETF1 monoclonal antibody (M02), clone 2H4. Western Blot analysis of ETF1 expression in HepG2 ( (Cat # AT1951a )





Western Blot analysis of ETF1 expression in transfected 293T cell line by ETF1 monoclonal antibody (M02), clone 2H4.

Lane 1: ETF1 transfected lysate (Predicted MW: 49 KDa). Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged ETF1 is approximately 1ng/ml as a capture antibody. ETF1 Antibody (monoclonal) (M02) - Background

Termination of protein biosynthesis and release of the nascent polypeptide chain are signaled by the presence of an in-frame stop codon at the aminoacyl site of the ribosome. The process of translation termination is universal and is mediated by protein release factors (RFs) and GTP. A class 1 RF recognizes the stop codon and promotes the hydrolysis of the ester bond linking the polypeptide chain with the peptidyl site tRNA, a reaction catalyzed at the peptidyl transferase center of the ribosome. Class 2 RFs, which are not codon specific and do not recognize codons, stimulate class 1 RF activity and confer GTP dependency upon the process. In prokaryotes, both class 1 RFs, RF1 and RF2, recognize UAA; however, UAG and UGA are decoded specifically by RF1 and RF2, respectively. In eukaryotes, eRF1, or ETF1, the functional counterpart of RF1 and RF2, functions as an omnipotent RF, decoding all 3 stop codons (Frolova et al., 1994 [PubMed 7990965]).

# ETF1 Antibody (monoclonal) (M02) - References

Identification of a cellular factor that modulates HIV-1 programmed ribosomal frameshifting. Kobayashi Y, et al. J Biol Chem, 2010 Jun 25. PMID 20418372.Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.Does glutamine methylation affect the intrinsic conformation of the universally conserved GGQ motif in ribosomal release factors? And?r M, et al. Biochemistry, 2009 Apr 21. PMID 19265422.[Interface of the interaction of the middle domain of human translation termination factor eRF1 with eukaryotic ribosomes] Ivanova EV, et al. Mol Biol (Mosk), 2008 Nov-Dec. PMID 19140327.HemK2 protein,



encoded on human chromosome 21, methylates translation termination factor eRF1. Figaro S, et al. FEBS Lett, 2008 Jul 9. PMID 18539146.