

ETF1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant ETF1.

Catalog # AT1951a

Product Information

Application	WB, E
Primary Accession	P62495
Other Accession	NM_004730
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	2H4
Calculated MW	49031

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.

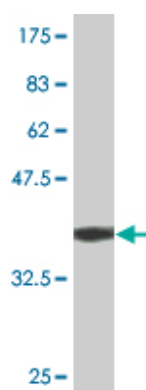
Background

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]).

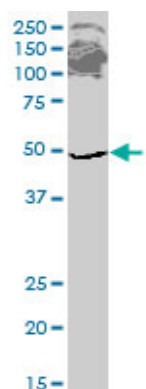
References

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.

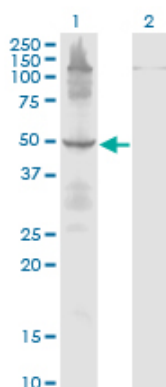
Images



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



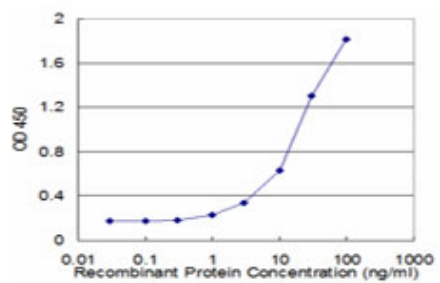
ETF1 monoclonal antibody (M02), clone 2H4. Western Blot analysis of ETF1 expression in HepG2 (Cat # AT1951a)



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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.