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Anti-eTF1 Antibody

Catalog # AP95821

Product Information

Application	WB, FC
Primary Accession	P62495
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	49031

Additional Information

Gene ID	2107
Other Names	ERF1; RF1; SUP45L1; EukaryotIC, peptide chain release factor subunit 1; EukaryotIC, release factor 1; eRF1; Protein Cl1; TB3-1
Target/Specificity	Recombinant fusion protein of human eTF1 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

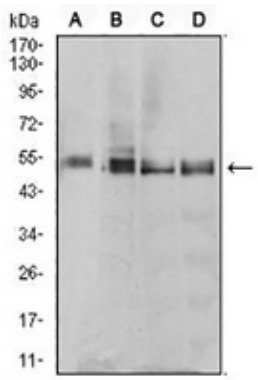
Protein Information

Name	ETF1
Synonyms	ERF1, RF1, SUP45L1
Function	Component of the eRF1-eRF3-GTP ternary complex, a ternary complex that mediates translation termination in response to the termination codons (PubMed:10676813, PubMed:16777602, PubMed:24486019, PubMed:26245381, PubMed:27863242, PubMed:36638793, PubMed:7990965). The eRF1-eRF3-GTP complex binds to a stop codon in the ribosomal A-site (PubMed:26245381, PubMed:27863242, PubMed:36638793). ETF1/ERF1 is responsible for stop codon recognition and inducing hydrolysis of peptidyl-tRNA (PubMed:26245381, PubMed:27863242, PubMed:36638793). Following GTP hydrolysis, eRF3 (GSPT1/ERF3A or GSPT2/ERF3B) dissociates, permitting ETF1/eRF1 to accommodate fully in the A-site and mediate hydrolysis of peptidyl-tRNA (PubMed:10676813, PubMed:16777602, PubMed:26245381, PubMed:27863242). Component of the transient SURF complex which recruits UPF1 to stalled ribosomes in the context of nonsense-mediated decay (NMD) of mRNAs containing premature stop codons (PubMed:19417104). Required for SHFL-mediated translation

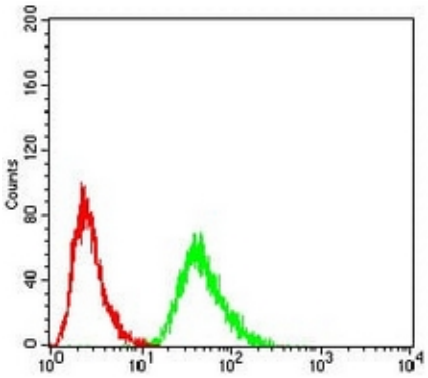
termination which inhibits programmed ribosomal frameshifting (-1PRF) of mRNA from viruses and cellular genes (PubMed:30682371).

Cellular Location Cytoplasm.

Images



Western blot analysis of eTF1 expression in MCF7 (A), T47D (B), MOLT4 (C), Raji (D) whole cell lysates. (Predicted band size: 49 kD; Observed band size: 52 kD)



Flow cytometric analysis of HeLa cells using Anti-eTF1 Antibody (green) and negative control (red).