

eRF3a Polyclonal Antibody

Catalog # AP69802

Product Information

Application WB, IHC-P **Primary Accession** P15170

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW55756

Additional Information

Gene ID 2935

Other Names GSPT1; ERF3A; Eukaryotic peptide chain release factor GTP-binding subunit

ERF3A; Eukaryotic peptide chain release factor subunit 3a; eRF3a; G1 to S

phase transition protein 1 homolog

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name GSPT1

Synonyms ERF3A

Function GTPase component of the eRF1-eRF3-GTP ternary complex, a ternary

complex that mediates translation termination in response to the termination codons UAA, UAG and UGA (PubMed:15987998, PubMed:19417105, PubMed:2511002, PubMed:27863242). GSPT1/ERF3A mediates ETF1/ERF1 delivery to stop codons: The eRF1-eRF3-GTP complex binds to a stop codon in the ribosomal A-site (PubMed:27863242). GTP hydrolysis by GSPT1/ERF3A induces a conformational change that leads to its dissociation, permitting

ETF1/ERF1 to accommodate fully in the A-site (PubMed: 16777602,

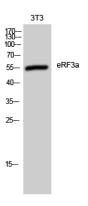
PubMed: 27863242). Component of the transient SURF complex which recruits UPF1 to stalled ribosomes in the context of nonsense-mediated decay (NMD) of mRNAs containing premature stop codons (PubMed: 24486019). Required for SHFL-mediated translation termination which inhibits programmed ribosomal frameshifting (-1PRF) of mRNA from viruses and cellular genes

(PubMed: 30682371).

Background

Involved in translation termination in response to the termination codons UAA, UAG and UGA (By similarity). Stimulates the activity of ETF1 (By similarity). Involved in regulation of mammalian cell growth (PubMed:2511002). 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:24486019).

Images



Western Blot analysis of 3T3 cells using eRF3a Polyclonal Antibody

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