

ERF3B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9663c

Product Information

Application WB, E Primary Accession Q8IYD1

Other Accession Q8R050, P15170
Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB24380
Calculated MW 68883
Antigen Region 216-245

Additional Information

Gene ID 23708

Other Names Eukaryotic peptide chain release factor GTP-binding subunit ERF3B, Eukaryotic

peptide chain release factor subunit 3b, eRF3b, G1 to S phase transition

protein 2 homolog, GSPT2, ERF3B

Target/Specificity This ERF3B antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 216-245 amino acids from the Central

region of human ERF3B.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions ERF3B Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name GSPT2

Synonyms ERF3B

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:11524954, PubMed:15987998, PubMed:17562865). GSPT2/ERF3B mediates ETF1/ERF1 delivery to stop codons: The eRF1-eRF3-GTP complex binds to a stop codon in the ribosomal A-site (PubMed:15987998). GTP hydrolysis by GSPT2/ERF3B induces a conformational change that leads to its dissociation, permitting ETF1/ERF1 to accommodate fully in the A-site (PubMed:15987998). 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).

Cellular Location Cytoplasm.

Tissue Location Highly expressed in IUCC stage II colorectal cancer (CRC).

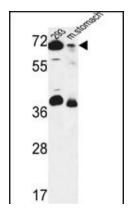
Background

ERF3B encodes a GTPase that belongs to the GTP-binding elongation factor family. The encoded protein is a polypeptide release factor that complexes with eukaryotic peptide chain release factor 1 to mediate translation termination. This protein may also be involved in mRNA stability.

References

Cheng, Z., et al. Genes Dev. 23(9):1106-1118(2009) Zhouravleva, G., et al. IUBMB Life 58(4):199-202(2006) Chauvin, C., et al. Mol. Cell. Biol. 25(14):5801-5811(2005) Hoshino, S., et al. J. Biol. Chem. 274(24):16677-16680(1999) Hansen, L.L., et al. Cytogenet. Cell Genet. 86 (3-4), 250-251 (1999)

Images



ERF3B Antibody (Center) (Cat. #AP9663c) western blot analysis in 293 cell line and mouse stomach tissue lysates (35ug/lane). This demonstrates the ERF3B antibody detected the ERF3B protein (arrow).

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