10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
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).

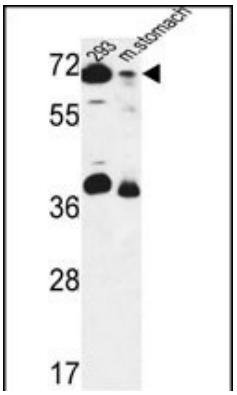
Background

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'.