

Anti-GSPT1 Antibody

Rabbit polyclonal antibody to GSPT1 Catalog # AP60744

Product Information

ApplicationWB, IHCPrimary AccessionP15170Other AccessionQ8R050

Reactivity Human, Mouse, Zebrafish

HostRabbitClonalityPolyclonalCalculated MW55756

Additional Information

Gene ID 2935

Other Names 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

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human GSPT1. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/100 - 1/200)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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:<u>15987998</u>, PubMed:<u>19417105</u>, PubMed:<u>2511002</u>, PubMed:<u>27863242</u>). 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:<u>27863242</u>). 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,

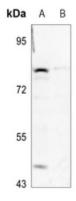
PubMed: <u>27863242</u>). Component of the transient SURF complex which recruits

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).

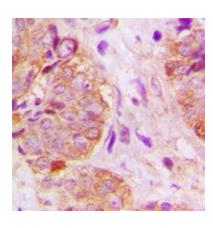
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GSPT1. The exact sequence is proprietary.

Images



Western blot analysis of GSPT1 expression in H1792 (A), H446 (B) whole cell lysates.



Immunohistochemical analysis of GSPT1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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