

For Research Use Only

# eRF3a/GSPT1 Polyclonal antibody

Catalog Number:10763-1-AP

Featured Product

18 Publications



## Basic Information

### Catalog Number:

10763-1-AP

### Size:

150ul , Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1184

### GenBank Accession Number:

BC009503

### GeneID (NCBI):

2935

### UNIPROT ID:

P15170

### Full Name:

G1 to S phase transition 1

### Calculated MW:

68 aa, 4 kDa

### Observed MW:

80-85 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:12000

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

**WB** : A549 cells, HepG2 cells, Caco-2 cells, HCT 116 cells, HeLa cells, MOLT-4 cells

**IHC** : human liver cancer tissue, mouse brain tissue, human lung cancer tissue

**IF/ICC** : MCF-7 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

The eukaryotic Release Factor 3 (eRF3) is a GTPase that associates with eRF1 in a complex that mediates translation termination. Eukaryotic release factor 3 (eRF3) has many functions in eukaryotic cells, such as controlling the regulation of the cell cycle at the G1 to S phase transition, and regulating protein synthesis as a GTP dependent stimulator of eRF1 in translation termination. It was also reported to play a key role as an initiator of the mRNA degradation machinery in the recycling of ribosomes in successive cycles of translation, and probably also in transcription regulation. eRF3a, also known as GSPT1, is one subunit of eRF3 (PMID:15917414, 12923185). It involves in translation termination in response to the termination codons UAA, UAG and UGA and stimulates the activity of eRF1. eRF3a/GSPT1 exists some isoforms with MV 69 kDa and 56 kDa. Identification of a processed form of eRF3a/GSPT1 as a BIR3-binding protein-Using a GST-BIR3 fusion protein as an affinity reagent to purify new IAP binding proteins from extracts of human cells and mouse tissues, we previously isolated 3 proteins of molecular weights 23, 38 and 80 kDa. 80 kDa band confirmed that it is a processed form of the human GSPT1/eRF3a protein, lacking the first 69 residues (PMID: 12865429).

## Notable Publications

Author	Pubmed ID	Journal	Application
Cheng Zhang	31539861	Biomed Pharmacother	WB
Yuxin Ding	36386842	Front Genet	IHC
Yusuke Terui	25425115	Amino Acids	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

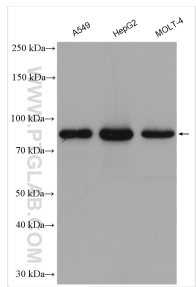
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

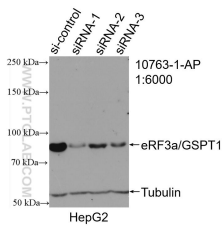
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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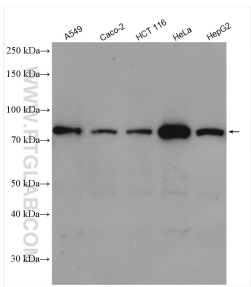
Selected Validation Data



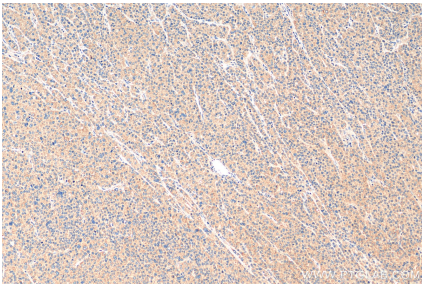
Various lysates were subjected to SDS PAGE followed by western blot with 10763-1-AP (eRF3a/GSPT1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



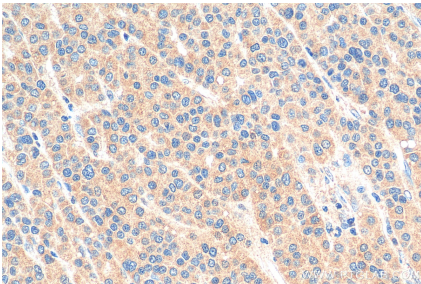
WB result of eRF3a/GSPT1 antibody (10763-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-eRF3a/GSPT1 transfected HepG2 cells.



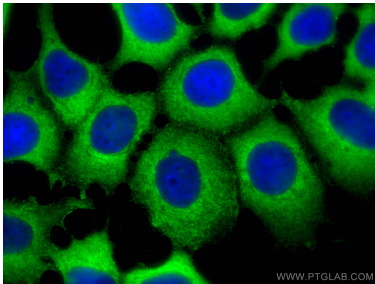
Various lysates were subjected to SDS PAGE followed by western blot with 10763-1-AP (eRF3a/GSPT1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



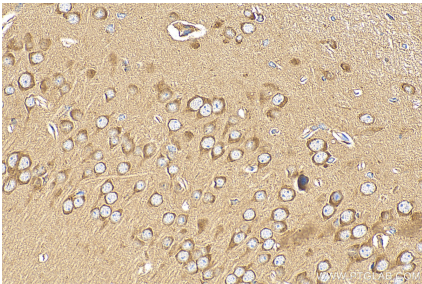
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10763-1-AP (eRF3a/GSPT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



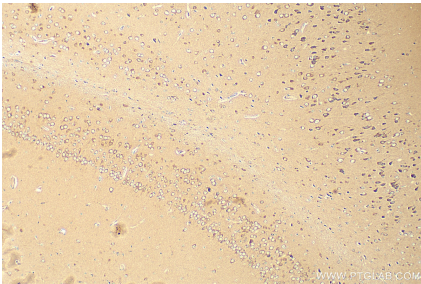
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10763-1-AP (eRF3a/GSPT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using eRF3a/GSPT1 antibody (10763-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10763-1-AP (eRF3a/GSPT1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10763-1-AP (eRF3a/GSPT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).