

For Research Use Only

eRF3a/GSPT1 Monoclonal antibody

Catalog Number: 68217-1-Ig

Featured Product

2 Publications



Basic Information

Catalog Number:

68217-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG27986

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:

Protein A purification

CloneNo.:

2A3H6

Recommended Dilutions:

WB 1:5000-1:50000

IF/ICC 1:400-1:1600

Applications

Tested Applications:

WB, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

Human, Mouse, Rat, Pig

Cited Species:

human

Positive Controls:

WB: HCT 116 cells, COLO 320 cells, HepG2 cells, pig brain tissue, LNCaP cells, HeLa cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

IF/ICC: HepG2 cells, PC-3 cells

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
Ziwei Luo	39437162	Cancer Res	WB
Yunkai Shi	39041067	J Med Chem	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

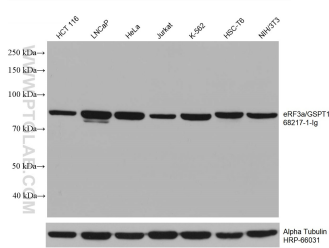
For technical support and original validation data for this product please contact:

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

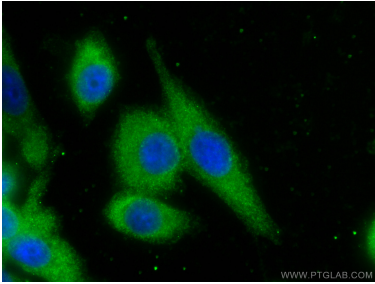
E: proteintech@ptglab.com
W: ptglab.com

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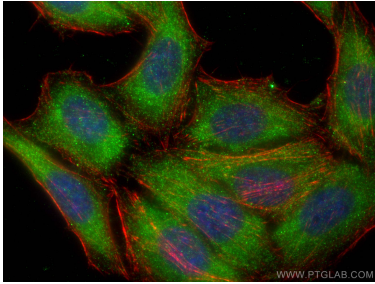
Selected Validation Data



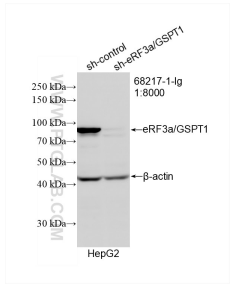
Various lysates were subjected to SDS PAGE followed by western blot with 68217-1-Ig (eRF3a/GSPT1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using eRF3a/GSPT1 antibody (68217-1-Ig, Clone: 2A3H6) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using eRF3a/GSPT1 antibody (68217-1-Ig, Clone: 2A3H6) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).



WB result of eRF3a/GSPT1 antibody (68217-1-Ig; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-eRF3a/GSPT1 transfected HepG2 cells.