For Research Use Only

CoraLite® Plus 488-conjugated eRF3a/GSPT1 Monoclonal antibody



Catalog Number: CL488-68217

Basic Information

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BC009503

Purification Method: Protein A purification

Size: 1000 µg/ml

GeneID (NCBI): 2935 CloneNo.: 2A3H6

Source: Mouse Isotype: UNIPROT ID: P15170 Recommended Dilutions: IF/ICC 1:50-1:500

lgG2a

Full Name: G1 to S phase transition 1

GenBank Accession Number:

Excitation/Emission maxima

Immunogen Catalog Number:

Calculated MW: 68 aa, 4 kDa wavelengths: 493 nm / 522 nm

AG27986

Observed MW: 80-85 kDa

Applications

Tested Applications: IF/ICC, FC (Intra) Species Specificity: human, mouse, rat, pig Positive Controls:

IF/ICC: HeLa cells, HepG2 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).

Storage

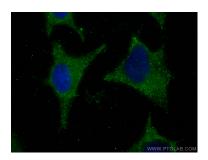
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

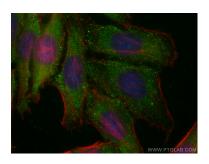
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

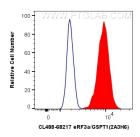
Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed Hela cells using Coralite® Plus 488 eRF3a/GSPT1 antibody (CL488-68217, Clone: 2A3H6) at dilution of 1:100.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Coralite® Plus 488 eRF3a/GSPT1 antibody (CL488-68217, Clone: 2A3H6) at dilution of 1:100, CL594-phalloidin (red).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human eRF3a/GSPT1 (CL488-68217, Clone:2A3H6) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL488-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).