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EI2BG Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8608b

Specification

EI2BG Antibody - Product Information

Application	**WB, FC, IF,E**
Primary Accession	Q9NR50
Reactivity	**Human**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG1,k**
Calculated MW	**50240**

EI2BG Antibody - Additional Information

Gene ID 8891

Other Names
Translation initiation factor eIF-2B subunit gamma, eIF-2B GDP-GTP exchange factor subunit gamma, EIF2B3

Target/Specificity
This EI2BG antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 110-452 amino acids from human EI2BG.

Dilution
WB~~1:2000
FC~~1:25
IF~~1:25
E~~Use at an assay dependent concentration.

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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
EI2BG Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EI2BG Antibody - Protein Information

Name EIF2B3

Function Acts as a component of the translation initiation factor 2B (eIF2B) complex, which

catalyzes the exchange of GDP for GTP on the eukaryotic initiation factor 2 (eIF2) complex gamma subunit (PubMed:25858979, PubMed:27023709, PubMed:31048492). Its guanine nucleotide exchange factor activity is repressed when bound to eIF2 complex phosphorylated on the alpha subunit, thereby limiting the amount of methionyl-initiator methionine tRNA available to the ribosome and consequently global translation is repressed (PubMed:25858979, PubMed:31048492).

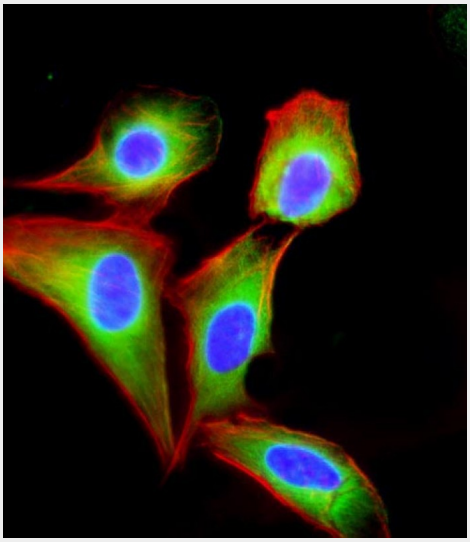
Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P56288}

EI2BG Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EI2BG Antibody - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling EI2BG with AM8608b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Mouse IgG (174309) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on U-2 OS cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).

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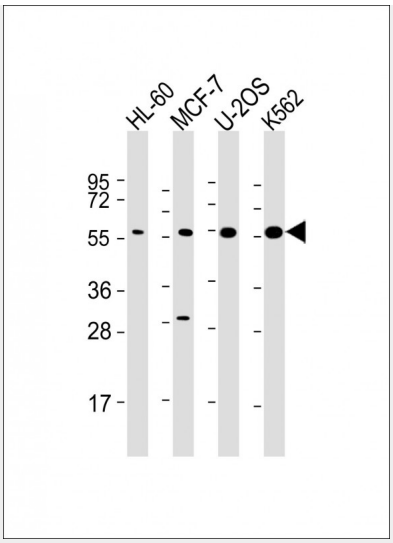
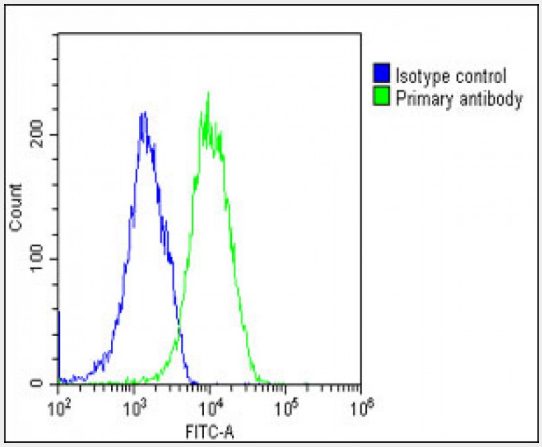


All lanes : Anti-EI2BG Antibody at 1:2000 dilution Lane 1: HL-60 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: U-2OS whole cell lysate Lane 4: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing U-2 OS cells stained with AM8608b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8608b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NH174309) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was mouse IgG2b (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

EI2BG Antibody - Background

Catalyzes the exchange of eukaryotic initiation factor 2-bound GDP for GTP.

EI2BG Antibody - References

Krueger M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:8566-8571(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

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