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EI2BG Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8608b

Product Information

Application	WB, FC, IF, E
Primary Accession	Q9NR50
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1778CT889.66.6.54
Calculated MW	50240

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.

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}

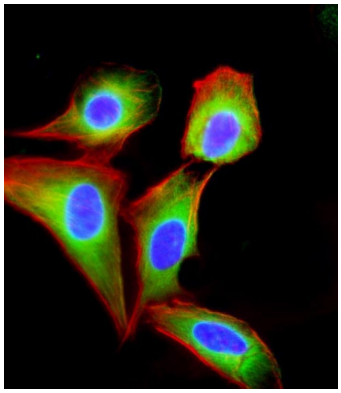
Background

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

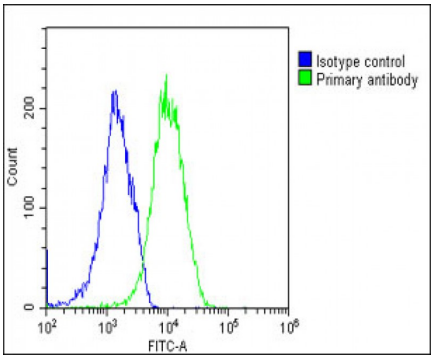
References

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.

Images

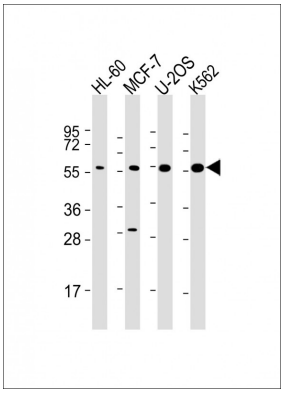


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling EI2BG with AM8608b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Mouse IgG (174309) secondary antibody at 1/200 dilution (green). Immunofluorescence 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).



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.

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.



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