

EI2BG Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8608b

Product Information

Application	WB, FC, IF, E
Primary Accession	Q9NR50
Reactivity	Human
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}

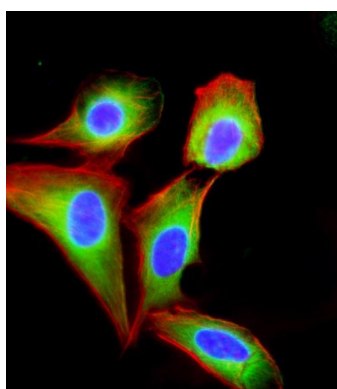
Background

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

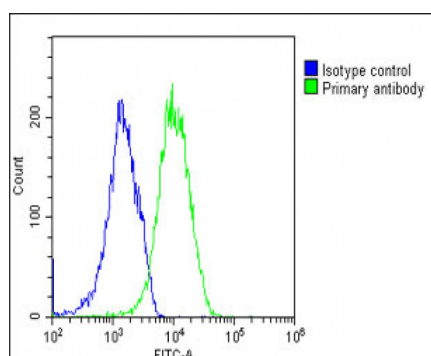
References

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

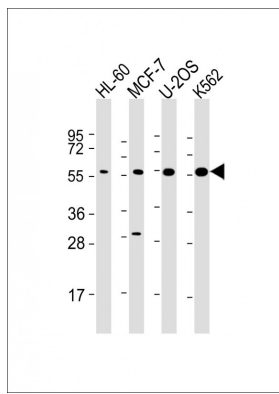


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling EI2BG with AM8608b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Mouse IgG (174309) secondary antibody at 1/200 dilution (green). Immunofluorescence 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 incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8608b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NH174309) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG2b (1µg/1x10⁶ 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'.