

Human Phospho-elF4B (S422) Antibody

Monoclonal Rat IgG_{2A} Clone # 866049 Catalog Number: MAB3800

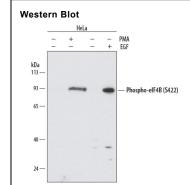
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human elF4B when phosphorylated at S422	
Source	Monoclonal Rat IgG _{2A} Clone # 866049	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Phosphopeptide containing the human eIF4B S422 site	
Formulation	mulation Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of Human Phospho-elF4B (\$422) by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA for 20 minutes or 100 ng/mL Recombinant Human EGF (Catalog # 236-EG) for 5 minutes. PVDF membrane was probed with 1 µg/mL of Rat Anti-Human Phospho-elF4B (S422) Monoclonal Antibody (Catalog # MAB3800) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for PhosphoelF4B (S422) at approximately 93 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.5 mg/mL

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution

BACKGROUND

eIF4B (eukaryotic translation initiation factor 4B), an RNA binding protein, is essential for the binding of mRNA to the 43S pre-initiation complex, which consists of the 40S ribosomal subunit bound to a ternary complex of eIF2, GTP, and Met-tRNA stabilized by eIF3. An arginine rich motif (ARM) in the carboxy-terminus of eIF4B binds RNA non-specifically, while a canonical RNA motif (RMM) near the amino terminus binds specifically to 18S rRNA. The simultaneous binding of specific and nonspecific RNA may serve to facilitate the binding of the 40S subunit to the mRNA by serving as a bridge between the 18S rRNA and the mRNA. Besides its binding activity, eIF4B in conjunction with the heterotrimeric eIF4F, stimulates the ATPase and RNA helicase activity of eIF4E.

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