

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human eIF4B 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
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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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