

## DESCRIPTION

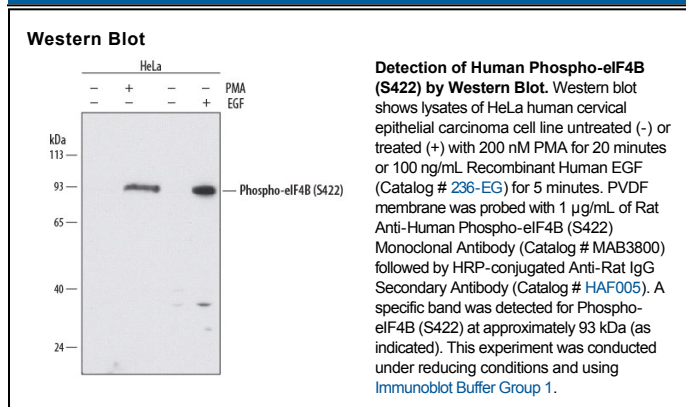
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human eIF4B when phosphorylated at S422
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 866049
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Phosphopeptide containing the human eIF4B S422 site
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.