

# eIF4B (Phospho Ser422) Rabbit pAb

Catalog#: AP0280 | Size: 30µL/50µL/100µL

## **Main Information**

Target	Host Species	Reactivity	Application	MW	Conjugated/Modification
elF4B	Rabbit	Human, Mouse	WB, IHC, IF, ELISA	80kD (Observed)	Phospho

## **Detailed Information**

Recommeded Dilution Ratio	WB 1:500-1:2000; IHC 1:100-1:300; IF 1:200-1:1000; ELISA 1:40000; Not yet tested in other applications.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Specificity	Phospho-eIF4B (S422) Polyclonal Antibody detects endogenous levels of eIF4B protein only when phosphorylated at S422.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TGSES
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatog- raphy using epitope-specific immunogen.
Storage	-15°C to -25°C/1 year(Do not lower than -25°C)
Concentration	1 mg/ml
MW(Observed)	80kD
Modification	Phospho
Clonality	Polyclonal
Isotype	lgG



# Antigen&Target Information

Immunogen	The antiserum was produced against synthesized peptide derived from human eIF4B around the phosphorylation site of Ser422. AA range:388-437
Specificity	Phospho-eIF4B (S422) Polyclonal Antibody detects endogenous levels of eIF4B protein only when phosphorylated at S422.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TGSES
Gene Name	EIF4B
Protein Name	Eukaryotic translation initiation factor 4B
Other Name	EIF4B ;Eukaryotic translation initiation factor 4B ;eIF-4B

#### **Database Link**

Organism	Gene ID	SwissProt
Human	3716	P23588
Mouse	75705	Q8BGD9

#### Background

function:Required for the binding of mRNA to ribosomes. Functions in close association with EIF4-F and EIF4-A. Binds near the 5'-terminal cap of mRNA in presence of EIF-4F and ATP. Promotes the ATPase activity and the ATP-dependent RNA unwinding activity of both EIF4-A and EIF4-F.,similarity:Contains 1 RRM (RNA recognition motif) domain.,subunit:-Self-associates and interacts with EIF3 p170 subunit.

#### Function

Function:Required for the binding of mRNA to ribosomes. Functions in close association with EIF4-F and EIF4-A. Binds near the 5'-terminal cap of mRNA in presence of EIF-4F and ATP. Promotes the ATPase activity and the ATP-dependent RNA unwinding activity of both EIF4-A and EIF4-F, similarity:Contains 1 RRM (RNA recognition motif) domain., subunit:-Self-associates and interacts with EIF3 p170 subunit.

#### **Cellular Localization**

cytosol,polysome,eukaryotic translation initiation factor 4F complex,dendrite,neuronal cell body.

#### **Tissue Expression**

Adipose tissue, Brain, Cervix carcinoma, Epithelium, Liver, Lung

#### **Research Areas**

- mTOR signaling pathway
- PI3K-Akt signaling pathway
- Proteoglycans in cancer



## **Signaling Pathway**

Cellular Processes >> Cell growth and death >> Necroptosis Cellular Processes >> Cellular community - eukaryotes >> Signaling pathways regulating pluripotency of stem cells Organismal Systems >> Immune system >> Toll-like receptor signaling pathway Organismal Systems >> Immune system >> NOD-like receptor signaling pathway Organismal Systems >> Immune system >> Th1 and Th2 cell differentiation Organismal Systems >> Immune system >> Th17 cell differentiation Organismal Systems >> Development and regeneration >> Osteoclast differentiation Human Diseases >> Cancer: overview >> Pathways in cancer Human Diseases >> Cancer: overview >> PD-L1 expression and PD-1 checkpoint pathway in cancer Human Diseases >> Cancer: specific types >> Pancreatic cancer Environmental Information Processing >> Signal transduction >> JAK-STAT signaling pathway Environmental Information Processing >> Signal transduction >> PI3K-Akt signaling pathway

## Validation Data





Western Blot analysis of 293 cells using Phospho-eIF4B (S422) Polyclonal Antibody diluted at 1:2000 Western Blot analysis of 293 cells using Phospho-eIF4B (S422) Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using eIF4B (Phospho-Ser422) Antibody. The picture on the right is blocked with the phospho peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using eIF4B (Phospho-Ser422) Antibody

## **Contact Information**

For Research Use Only. Not for Diagnostic Purposes