

## DATASHEET

# EIF2S1 (Phospho-S51) Rabbit Monoclonal Antibody(C1539)

CAT. NO. AMA01151

### KEY FEATURES

Target	EIF2S1 (Phospho-S51)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Member of the eIF2 complex that functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA . This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S pre-initiation complex (43S PIC) . Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF2 and release of an eIF2-GDP binary complex . In order for eIF2 to recycle and catalyze another round of initiation, the GDP bound to eIF2 must exchange with GTP by way of a reaction catalyzed by eIF2B .

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to EIF2S1 (Phospho-S51)
Specificity	Recognizes endogenous levels of EIF2S1 protein only when phosphorylated at S51
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S51 of human EIF2S1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 36 kD; Observed: 36 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	EIF2A; Eukaryotic translation initiation factor 2 subunit 1; Eukaryotic translation initiation factor 2 subunit alpha; eIF-2-alpha; eIF-2A; eIF-2alpha
Gene Symbol	EIF2S1
Entrez Gene	1965(Human); 13665(Mouse); 54318(Rat)
SwissProt	P05198(Human); Q6ZWX6(Mouse); P68101(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

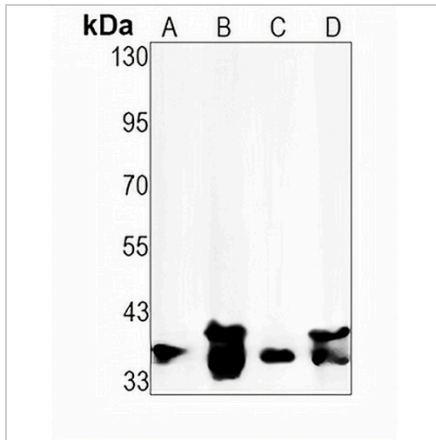
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

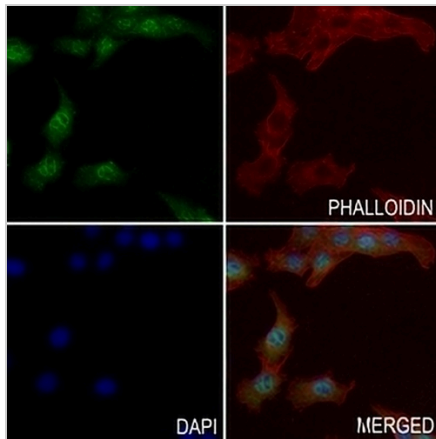
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**DATA**



Western blot analysis of EIF2S1 (Phospho-S51) expression in PC3 (A), mouse kidney (B), rat muscle (C), rat kidney (D) whole cell lysates. (Predicted band size: 36 kD; Observed band size: 36 kD)



Immunofluorescent analysis of EIF2S1 (Phospho-S51) staining in MC38 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 - conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.