

A21221

Leader in Biomolecular Solutions for Life Science



## eIF2 $\alpha$ Rabbit mAb

Catalog No.: A21221

Recombinant

10 Publications

### Basic Information

#### Observed MW

36kDa

#### Calculated MW

36kDa

#### Category

SMab Recombinant Monoclonal  
Antibody

#### Applications

WB,IHC-P,IF/ICC,ELISA

#### Cross-Reactivity

Human,Mouse,Rat

#### CloneNo number

ARC52379

### Recommended Dilutions

**WB** 1:4000 - 1:120000

**IF/ICC** 1:200 - 1:1000

**IHC-P** 1:500 - 1:2000

**ELISA** Recommended starting  
concentration is 1  
 $\mu$ g/mL. Please optimize  
the concentration  
based on your specific  
assay requirements.

### Contact



[www.abclonal.com](http://www.abclonal.com)

### Background

The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3 nonidentical subunits, the 36-kD EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit (EIF2S2; MIM 603908), and the 52-kD EIF2-gamma subunit (EIF2S3; MIM 300161). The rate of formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha (Ernst et al., 1987 [PubMed 2948954]).

### Immunogen Information

#### Gene ID

1965

#### Swiss Prot

P05198

#### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-315 of human eIF2 $\alpha$  (NP\_004085.1).

#### Synonyms

EIF2; EIF-2; EIF2A; EIF-2A; EIF-2alpha; eIF2 $\alpha$

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

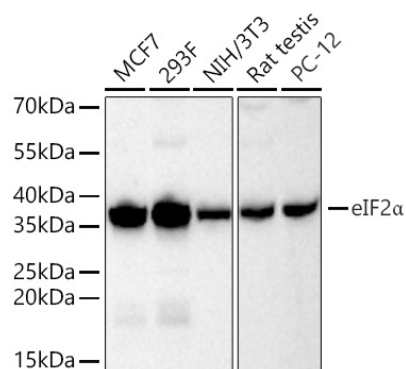
Affinity purification

#### Storage

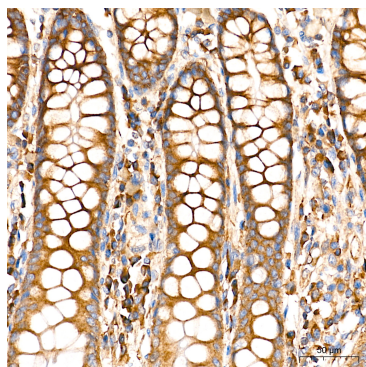
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

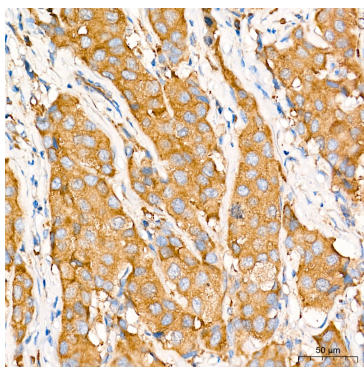
## Validation Data



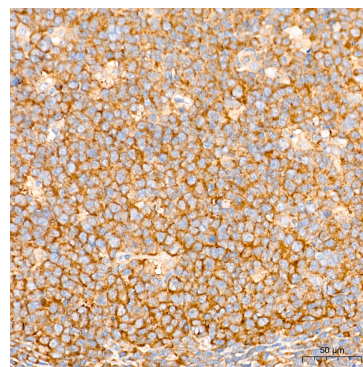
Western blot analysis of various lysates using eIF2α Rabbit mAb (A21221) at 1:21000 dilution incubated at room temperature for 1.5 hours.  
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25 µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 10s.



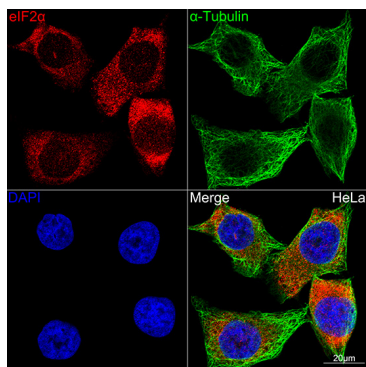
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using eIF2α Rabbit mAb (A21221) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using eIF2α Rabbit mAb (A21221) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using eIF2α Rabbit mAb (A21221) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of HeLa cells using eIF2α Rabbit mAb (A21221, dilution 1:500) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear

# Validation Data

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staining (Blue). Objective: 100x.