

## Basic Information

<b>Product Name</b>	Anti-EIF4A1 Antibody (Clone#11B8)	
<b>Gene Name</b>	EIF4A1	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG2b	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human EIF4A1, identical to the related mouse and rat sequences.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	46 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Eukaryotic initiation factor 4A-I is a protein that in humans is encoded by the EIF4A1 gene. It is mapped to 17p13.1. EIF4A1 has been shown to interact with EIF4E and eukaryotic translation initiation factor 4 gamma.

## Selected Validation Data

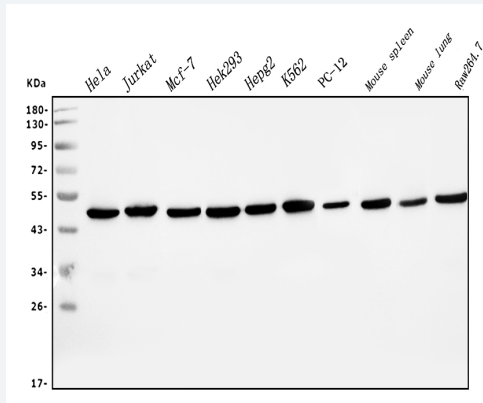


Figure 1. Western blot analysis of EIF4A1 using anti-EIF4A1 antibody (M03922-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HELA whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human HEK293 whole cell lysates,

Lane 5: human HepG2 whole cell lysates,

Lane 6: human K562 whole cell lysates,

Lane 7: rat PC-12 whole cell lysates,

Lane 8: mouse spleen tissue lysates,

Lane 9: mouse lung tissue lysates,

Lane 10: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-EIF4A1 antigen affinity purified monoclonal antibody (M03922-1) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for EIF4A1 at approximately 46 kDa. The expected band size for EIF4A1 is at 46 kDa.

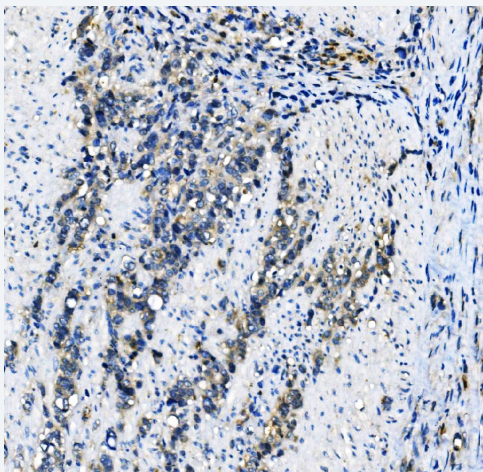


Figure 2. IHC analysis of EIF4A1 using anti-EIF4A1 antibody (M03922-1).

EIF4A1 was detected in a paraffin-embedded section of human gastric cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-EIF4A1 Antibody (M03922-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1022) as the chromogen.

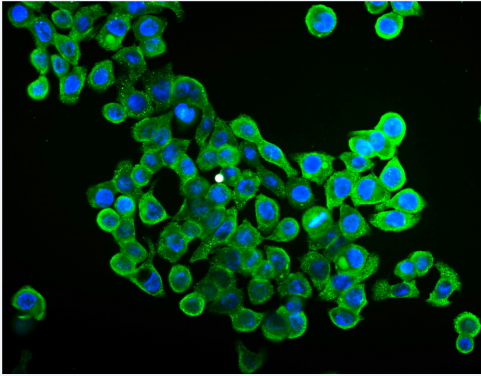


Figure 4. IF analysis of EIF4A1 using anti-EIF4A1 antibody (M03922-1).

EIF4A1 was detected in an immunocytochemical section of Caco-2 cells. The section was incubated with mouse anti-EIF4A1 Antibody (M03922-1) at a dilution of 1:100. DyLight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

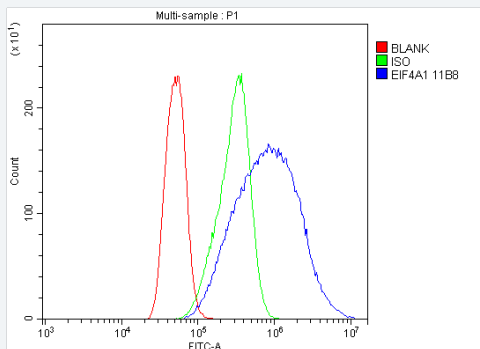


Figure 5. Flow Cytometry analysis of Caco-2 cells using anti-EIF4A1 antibody (M03922-1).

Overlay histogram showing Caco-2 cells stained with M03922-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-EIF4A1 Antibody (M03922-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.