

Basic Information

Product Name	Anti-EIF4A1 Antibody	
Gene Name	EIF4A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human EIF4A1, identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	46 kDa	
Dilution Ratios	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

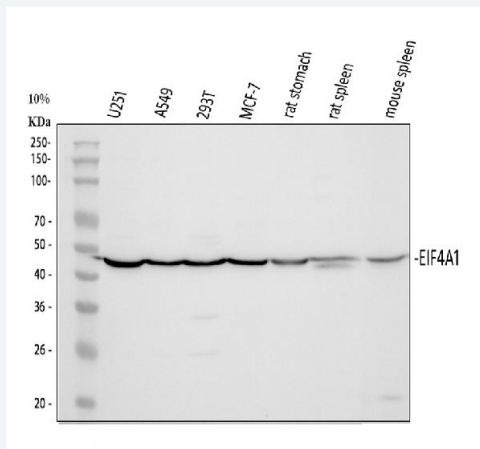


Figure 1. Western blot analysis of EIF4A1 using anti-EIF4A1 antibody (A03922-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human U251 whole cell lysates,
Lane 2: human A549 whole cell lysates,
Lane 3: human 293T whole cell lysates,
Lane 4: human MCF-7 whole cell lysates,
Lane 5: rat stomach tissue lysates,
Lane 6: rat spleen tissue lysates,
Lane 7: mouse spleen tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-EIF4A1 antigen affinity purified polyclonal antibody (A03922-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.

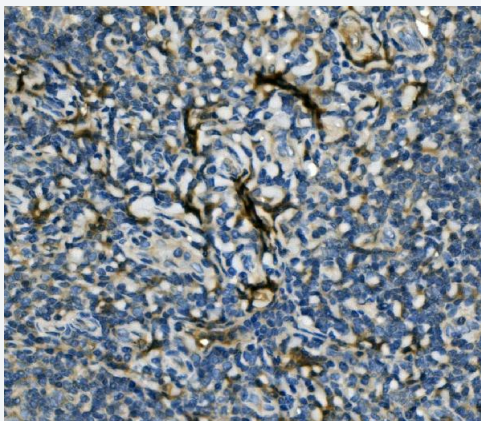


Figure 3. IHC analysis of EIF4A1 using anti-EIF4A1 antibody (A03922-3).

EIF4A1 was detected in a paraffin-embedded section of human tonsil tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-EIF4A1 Antibody (A03922-3) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

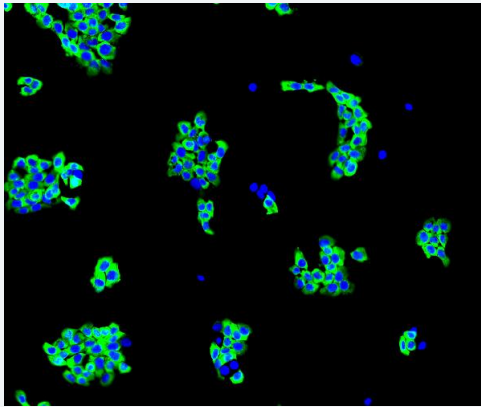


Figure 6. IF analysis of EIF4A1 using anti-EIF4A1 antibody (A03922-3).

EIF4A1 was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-EIF4A1 Antibody (A03922-3) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

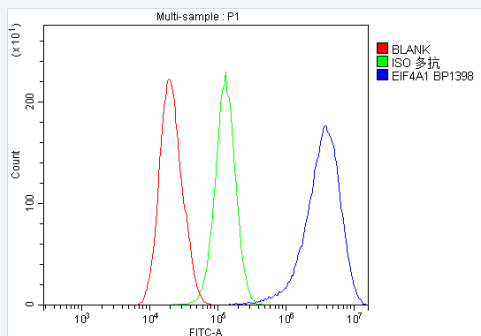


Figure 7. Flow Cytometry analysis of HepG2 cells using anti-EIF4A1 antibody (A03922-3).

Overlay histogram showing HepG2 cells stained with A03922-3 (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 rabbit anti-EIF4A1 Antibody (A03922-3) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit 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.