

## Basic Information

Product Name	Anti-EIF5A Antibody	
Gene Name	EIF5A	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human EIF5A recombinant protein (Position: E107-K154).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	18 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000	

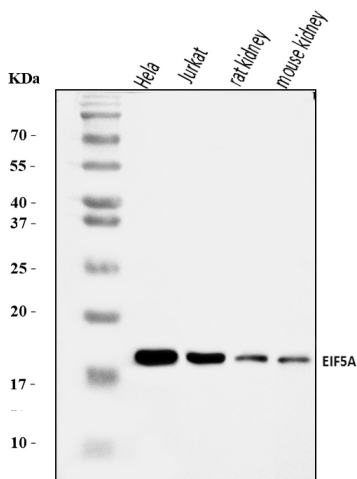
## Storage

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 translation initiation factor 5A-1 is a protein that in humans is encoded by the EIF5A gene. Eukaryotic initiation factor 5A (eIF5A) is an mRNA-binding protein that is involved in translation elongation and plays an important role in promoting translation of polypurine motifs. The eIF5A (eIF5A1) and eIF5A2 genes encode the two vertebrate eIF5A isoforms. While eIF5A1 is expressed constitutively in all tissues, eIF5A2 is mainly expressed in gonads. eIF5A and eIF5A2 are the only identified proteins that contain the distinctive amino acid hypusine, which is generated posttranslationally from lysine through a highly conserved polyamine metabolism pathway. eIF5A function and hypusine modification are both essential for cell proliferation, as knock down of eIF5A expression or blocking eIF5A hypusine modification suppresses cancer cell proliferation. Interestingly, eIF5A is an identified component of a tumor suppressor network of the polyamine-hypusine axis. Co-suppression of both eIF5A and adenosylmethionine decarboxylase 1 (AMD1) promotes lymphomagenesis in mice, while heterozygous deletions of the corresponding AMD1 and eIF5A genes often occur together in human lymphomas.

## Selected Validation Data



Western blot analysis of EIF5A using anti-EIF5A antibody

(A01727-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,

Lane 2: Jurkat whole cell lysates,

Lane 3: rat kidney tissue lysates,

Lane 4: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-EIF5A antigen

affinity purified polyclonal antibody (A01727-3) at a dilution of

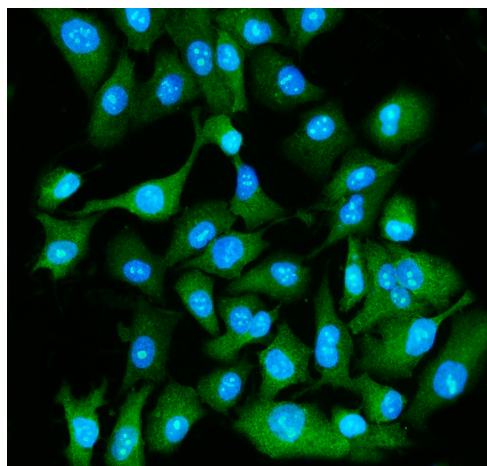
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL

Plus Western Blotting Substrate (Catalog # AR1197). A specific

band was detected for EIF5A at approximately 18 kDa. The

expected band size for EIF5A is at 17 kDa.



IF analysis of EIF5A using anti-EIF5A antibody (A01727-3).

EIF5A was detected in an immunocytochemical section of A549

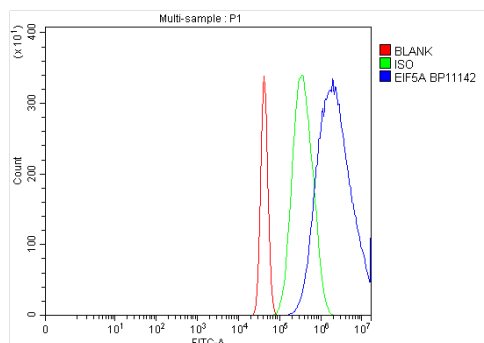
cells. The section was incubated with rabbit anti-EIF5A Antibody

(A01727-3) 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).



Flow Cytometry analysis of Neuro-2a cells using anti-EIF5A antibody (A01727-3).

Overlay histogram showing Neuro-2a cells stained with A01727-3 (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-EIF5A Antibody (A01727-3) 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.