Product datasheet

# Anti-EIF5A Antibody

**Catalog Number: *A01727-4***

BOSTER
antibody and ELISA experts
**BOSTER BIOLOGICAL TECHNOLOGY**
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## Basic Information

| | |
|---|---|
| **Product Name** | Anti-EIF5A Antibody |
| **Gene Name** | EIF5A |
| **Source** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Species Reactivity** | human, mouse, rat |
| **Tested Application** | WB, IHC, ICC/IF, FCM, ELISA |
| **Contents** | 500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol. |
| **Immunogen** | E.coli-derived human EIF5A recombinant protein (Position: R86-K154). |
| **Concentration** | 500 ug/ml |
| **Purification** | Immunogen affinity purified. |
| **Observed MW** | 18 kDa |
| **Dilution Ratios** | Western blot (WB): 1:500-2000<br>Immunohistochemistry (IHC): 1:50-400<br>Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400<br>Flow Cytometry (Fixed): 1:50-200<br>Enzyme linked immunosorbent assay (ELISA): 1:100-1000<br>(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℃ as supplied. 6 months 2 to 8℃ 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 polyproline 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-

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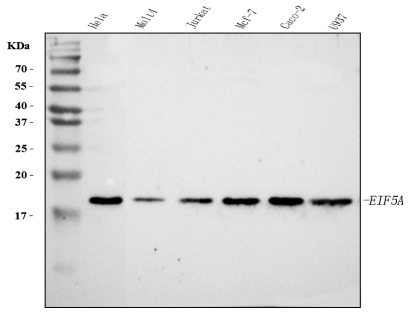
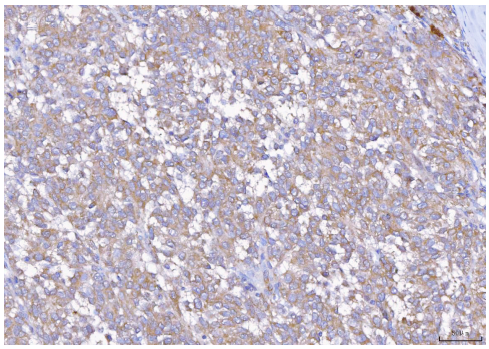
hypusine axis. Co-suppression of both eIF5A and adenosylmethionine decarboxylase 1 (AMD1) promotes lymphomagenesis in mice, while heterozygous deletions of the corresponding AMD1 and eIF5A genes often occur together in human lymphomas.

## Selected Validation Data




Western blot analysis of EIF5A using anti-EIF5A antibody (A01727-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: HELA whole cell lysates,
Lane 2: MOLT-4 whole cell lysates,
Lane 3: Jurkat whole cell lysates,
Lane 4: MCF-7 whole cell lysates,
Lane 5: CACO-2 whole cell lysates,
Lane 6: U937 whole cell lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-EIF5A antigen affinity purified polyclonal antibody (A01727-4) 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.



IHC analysis of EIF5A using anti-EIF5A antibody (A01727-4). EIF5A was detected in a paraffin-embedded section of human melanoma tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-EIF5A Antibody (A01727-4) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

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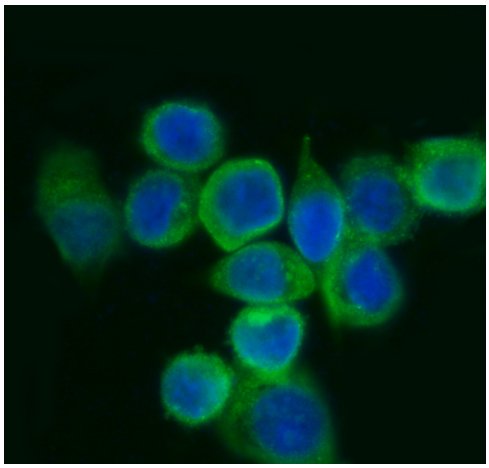
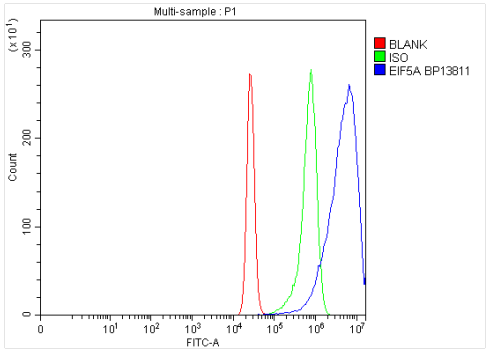


IF analysis of EIF5A using anti-EIF5A antibody (A01727-4).
EIF5A was detected in an immunocytochemical section of SiHa cells. The section was incubated with rabbit anti-EIF5A Antibody (A01727-4) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).




Flow Cytometry analysis of K562 cells using anti-EIF5A antibody (A01727-4).
Overlay histogram showing K562 cells stained with A01727-4 (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 (A01727-4) 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.