

Anti-EEF2 Picoband™ Antibody (monoclonal, 5F5)

Catalog Number: M00830-2

About EEF2

Eukaryotic elongation factor 2 is a protein that in humans is encoded by the EEF2 gene. This gene encodes a member of the GTP-binding translation elongation factor family. This protein is an essential factor for protein synthesis. It promotes the GTP-dependent translocation of the nascent protein chain from the A-site to the P-site of the ribosome. This protein is completely inactivated by EF-2 kinase phosphorylation.

Overview

Product Name	Anti-EEF2 Picoband™ Antibody (monoclonal, 5F5)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-EEF2 Picoband™ Antibody (monoclonal, 5F5) catalog # M00830-2. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal 5F5
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P13639

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human EEF2/Elongation factor 2, identical to the related mouse and rat sequences.
Predicted Reactive Species	Hepatitis Virus
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western blot, 0.25-0.5ug/ml, Human, Mouse, Rat

Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Huma

Immunocytochemistry/Immunofluorescence, 5ug/ml, Human

Flow Cytometry, 1-3ug/1x10⁶ cells, Human, Mouse, Rat

Anti-EEF2 Picoband™ Antibody (monoclonal, 5F5) (M00830-2) Images

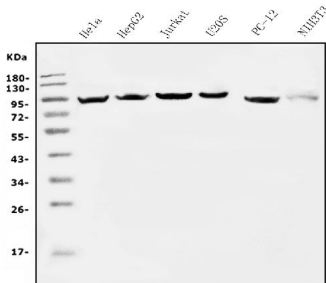


Figure 1. Western blot analysis of EEF2 using anti-EEF2 antibody (M00830-2).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,
Lane 2: human HEPG2 whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human U2OS whole cell lysates,
Lane 5: rat PC-12 whole cell lysates,
Lane 6: mouse NIH/3T3 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-EEF2 antigen affinity purified monoclonal antibody (Catalog # M00830-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for EEF2 at approximately 95KD. The expected band size for EEF2 is at 95KD.

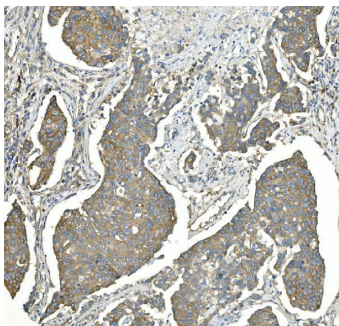


Figure 2. IHC analysis of EEF2 using anti-EEF2 antibody (M00830-2).

EEF2 was detected in paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-EEF2 Antibody (M00830-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

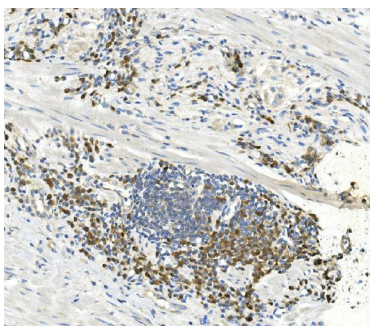


Figure 3. IHC analysis of EEF2 using anti-EEF2 antibody (M00830-2).

EEF2 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-EEF2 Antibody (M00830-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

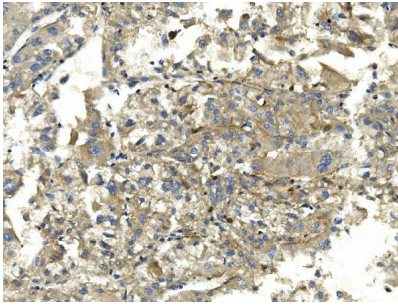


Figure 4. IHC analysis of EEf2 using anti-EEf2 antibody (M00830-2).
EEf2 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-EEf2 Antibody (M00830-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

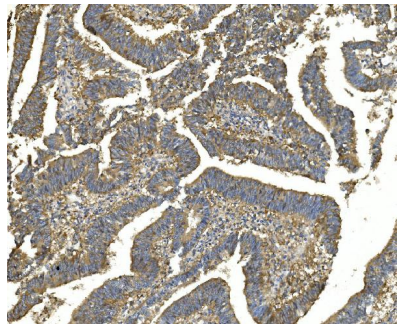


Figure 5. IHC analysis of EEf2 using anti-EEf2 antibody (M00830-2).
EEf2 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-EEf2 Antibody (M00830-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

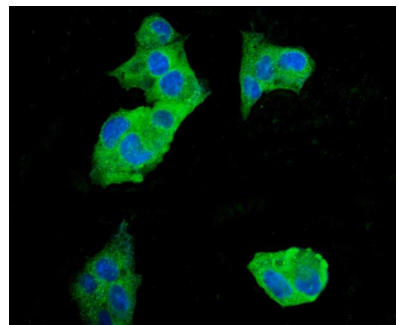


Figure 6. IF analysis of EEf2 using anti-EEf2 antibody (M00830-2).
EEf2 was detected in immunocytochemical section of HEPG2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL mouse anti-EEf2 Antibody (M00830-2) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

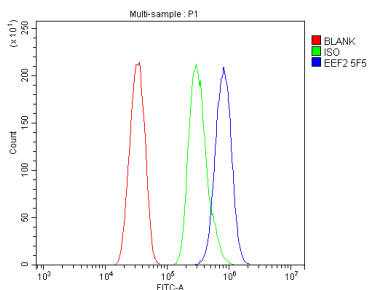
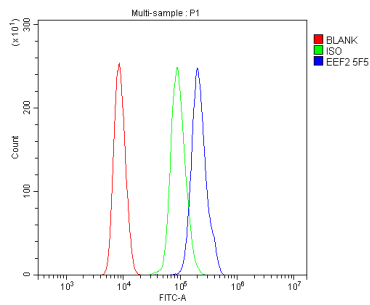


Figure 7. Flow Cytometry analysis of HEPA1-6 cells using anti-EEf2 antibody (M00830-2).
Overlay histogram showing HEPA1-6 cells stained with M00830-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-EEf2 Antibody (M00830-2, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Figure 8. Flow Cytometry analysis of HL-60 cells using anti-EEf2 antibody (M00830-2).
Overlay histogram showing HL-60 cells stained with



M00830-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-EEF2 Antibody (M00830-2, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

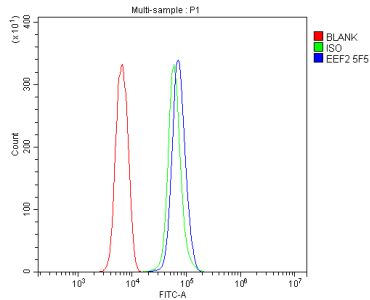


Figure 9. Flow Cytometry analysis of NRK cells using anti-EEF2 antibody (M00830-2). Overlay histogram showing NRK cells stained with M00830-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-EEF2 Antibody (M00830-2, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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