

Rabbit EIF2B1 Polyclonal Antibody | anti-EIF2B1 antibody

Anti-EIF2B1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125720	Rabbit	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

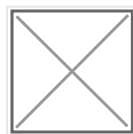
PRODUCT SYNONYMS

EIF2B1; Polyclonal Antibody; Anti-EIF2B1 Antibody; EIF2BA; Translation initiation factor eIF-2B subunit alpha; eIF-2B GDP-GTP exchange factor subunit alpha; eukaryotic translation initiation factor 2B subunit alpha; anti-EIF2B1 antibody

PRODUCT SPECIFICATIONS

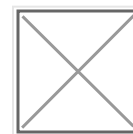
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for EIF2B1EIF2AK4 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-EIF2B1 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human CEIF2B1 (AESFKFVRLFPLNQD).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



IF (Immunofluorescence)

Figure 5. IF analysis of EIF2B1 using anti- EIF2B1 antibody (AAA125720).EIF2B1 was detected in immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti- EIF2B1 Antibody (AAA125720) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of PC-3 cells using anti-EIF2B1 antibody (AAA125720).Overlay histogram showing PC-3 cells stained with AAA125720 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-EIF2B1 Antibody (AAA125720,1µg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



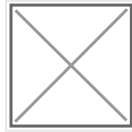
IHC (Immunohistochemistry)

Figure 3. IHC analysis of EIF2B1 using anti-EIF2B1 antibody (AAA125720). EIF2B1 was detected in paraffin-embedded section of rat brain 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 2 µg/ml rabbit anti-EIF2B1 Antibody (AAA125720) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of EIF2B1 using anti-EIF2B1 antibody (AAA125720). EIF2B1 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 2 µg/ml rabbit anti-EIF2B1 Antibody (AAA125720) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of EIF2B1 using anti-EIF2B1 antibody (AAA125720). 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 50 µg of sample under reducing conditions. Lane 1: rat liver tissue lysates. Lane 2: rat kidney tissue lysates. Lane 3: mouse liver tissue 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 rabbit anti-EIF2B1 antigen affinity purified polyclonal antibody (Catalog # AAA125720) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit 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 with Tanon 5200 system. A specific band was detected for EIF2B1 at approximately 34KD. The expected band size for EIF2B1 is at 34KD.

ADDITIONAL INFORMATION

Related Product Information for anti-EIF2B1 antibody	Translation initiation factor eIF-2B subunit alpha is a protein that in humans is encoded by the EIF2B1 gene. This gene encodes one of five subunits of eukaryotic translation initiation factor 2B (EIF2B), a GTP exchange factor for eukaryotic initiation factor 2 and an essential regulator for protein synthesis. Mutations in this gene and the genes encoding other EIF2B subunits have been associated with leukoencephalopathy with vanishing white matter.
References	1. Converse, P. J. Personal Communication. Baltimore, Md. 2/12/2002. 2. Flowers, K. M., Mellor, H., Kimball, S. R., Jefferson, L. S. Structure and sequence of the gene encoding the alpha-subunit of rat translation initiation factor-2B. Biochim. Biophys. Acta 1264: 163-167, 1995. 3. Gross, M. B. Personal Communication. Baltimore, Md. 5/28/2015.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503503
NCBI GeneID	1967
NCBI Accession #	NP_001405.1
NCBI GenBank Nucleotide #	NM_001414.3
UniProt Accession #	Q14232 ; Q3SXP4 ; A6NLY9 ; B4DGX0
Molecular Weight	24,618 Da
NCBI Official Full Name	translation initiation factor eIF-2B subunit alpha
NCBI Official Synonym Full Names	eukaryotic translation initiation factor 2B, subunit 1 alpha, 26kDa
NCBI Official Symbol	EIF2B1
NCBI Official Synonym Symbols	EIF2B; EIF2BA

NCBI Protein Information	translation initiation factor eIF-2B subunit alpha; eIF-2B GDP-GTP exchange factor subunit alpha
UniProt Protein Name	Translation initiation factor eIF-2B subunit alpha
UniProt Gene Name	EIF2B1
UniProt Synonym Gene Names	EIF2BA
UniProt Entry Name	EI2BA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/eif2b1-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125720>