

Datasheet for 600-101-ML6**EEF1A2 Antibody****Overview**

Description:	Anti-EEF1A2 (GOAT) Antibody - 600-101-ML6
Item No.:	600-101-ML6
Size:	100 µg
Applications:	IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Goat

Product Details

Background:	EEF1A2 (Eukaryotic Translation Elongation Factor 1 Alpha 2) protein promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. EEF1A2 encodes an isoform of the alpha subunit of the elongation factor-1 complex, which is responsible for the enzymatic delivery of aminoacyl tRNAs to the ribosome. This isoform (alpha 2) is expressed in brain, heart and skeletal muscle, and the other isoform (alpha 1) is expressed in brain, placenta, lung, liver, kidney, and pancreas. EEF1A2 may be associated with the development of ovarian cancer, along with Epileptic Encephalopathy, Early Infantile, 33 and Mental Retardation, Autosomal Dominant 38. Anti-EEF1A2 Antibody is useful for researchers interested in cancer research, translation factors, GTP binding, and GTPase activities.
Synonyms:	Goat Anti-EEF1A2 Antibody, Goat Anti-Eukaryotic Translation Elongation Factor 1 Alpha 2 Antibody, Eukaryotic Elongation Factor 1 A-2, EF-1-Alpha-2, Statin-S1, EEF1AL, STN 3, Elongation Factor 1-Alpha 2, Statin-Like, EEF1A-2, EIEE33, Statin, MRD38, EF1A, STNL, HS1
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	EEF1A2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-EEF1A2 antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to a near C-terminal portion of human EEF1A2 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human EEF1A2. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to human, mouse, rat, bovine, and rabbit.
Relevant Links:	• UniProtKB - Q05639 • NCBI - NP_001949.1 • GenelD - 1917

Application Details

Tested Applications:	IF, IHC, WB
Application Note:	Anti-EEF1A2 Antibody has been tested in WB, IF, and IHC. Expect a band at ~50.5 kDa in western blot using appropriate lysates. Positive control used: human skeletal muscle lysate, MCF-7 nuclear extract lysate in WB, MCF-7 cells in IF, and human skeletal muscle tissue in IHC.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:50,000
IF:	15 µg/ml
IHC:	1:200
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.17 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

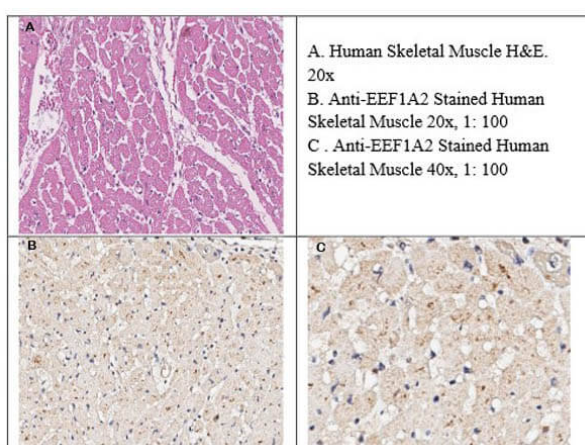
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

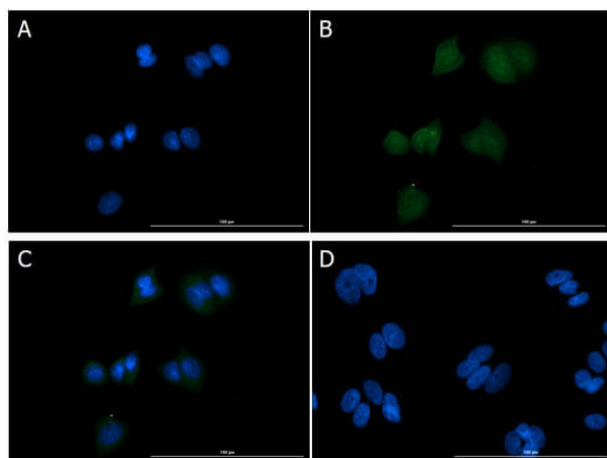
Expiration: Expiration date is one (1) year from date of receipt.

Images



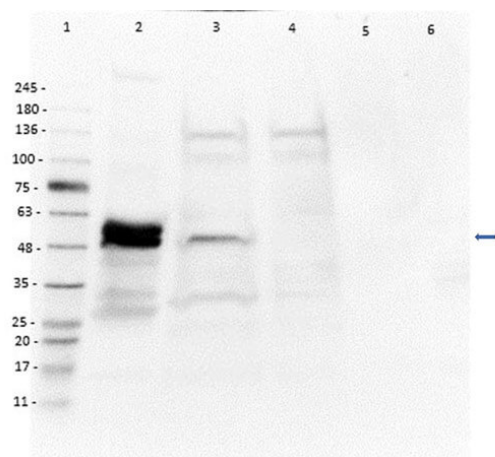
Immunohistochemistry

Immunohistochemistry of Goat Anti-EEF1A2 Antibody.
 Tissue: Human Skeletal Muscle. Fixative: none. Antigen Retrieval: HIER using Citrate buffer for 20 min. Primary Antibody: Anti-EEF1A2 at 1:100 for 30 min at RT. Secondary Antibody: Donkey Anti-Goat HRP Antibody (p/n 605-703-125) at 4µL/mL for 20 min at RT. Counterstain: Hematoxylin. Staining: EEF1A2 in human skeletal muscle shows weak to moderate cytoplasmic staining of myocytes consistent with EEF1A2.



Immunofluorescence Microscopy

Immunofluorescence of Goat Anti-EEF1A2 Antibody. Cell Line: MCF-7 cells. Fixative: 100% MeOH. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-EEF1A2 at 15µg/mL overnight at 2-8°C. Secondary Antibody: Donkey Anti-Goat DyLight™488 Antibody (p/n 605-741-125) at 5µg/mL for 1 hr at RT. Nuclear Counterstain: DAPI. Staining: (A) DAPI. (B) Anti-EEF1A2 + secondary. (C) merge A+B. (D). Secondary Only. Localization Expected: nucleoli, cytosol.



Western Blot

Western Blot of Goat Anti-EEF1A2 Antibody. Lane 1: Opal Pre-stained Marker (p/n MB-210-0500). Lane 2: Human Skeletal Muscle Lysate [+]. Lane 3: MCF-7 Nuclear Extract (p/n W09-001-A85) [+]. Lane 4: Mouse Adult Brain Lysate (p/n W10-000-T004) [low+]. Lane 5: Mouse Liver Lysate (p/n W10-000-T020) [-]. Load: 35µg. Primary Antibody: Anti-EEF1A2 at 1:1000 overnight at 2-8°C. Secondary Antibody: Donkey Anti-Goat HRP Antibody (p/n 605-703-125) at 1:5000 at RT for 30 min. Buffer: BlockOut buffer (p/n MB-073). Predicted: 50 kDa, Observed: ~50, 60 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.