

Datasheet for 200-901-MK9S**EIF4E Antibody****Overview**

Description:	Anti-EIF4E (CHICKEN) Antibody - 200-901-MK9S
Item No.:	200-901-MK9S
Size:	25 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse
Host Species:	Chicken

Product Details

Background:	EIF4E (Eukaryotic Translation Initiation Factor 4E) recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the unwinding of the mRNAs secondary structures. It is a component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E-FMR1 complex this subunit mediates the binding to the mRNA cap. EIF4E is associated with Autism 19 and Pervasive Developmental Disorder. Anti-EIF4E Antibody is useful for researcher interested in cancer research and AKT signaling.
Synonyms:	Chicken Anti-EIF4E Antibody, Eukaryotic Translation Initiation Factor 4E, mRNA Cap-Binding Protein, EIF-4F 25 KDa Subunit, EIF4EL1, EIF-4E, EIF4F, Eukaryotic Translation Initiation Factor 4E-Like 1, AUTS19, EIF4E1, EIF4E, CBP
Host Species:	Chicken
Clonality:	Polyclonal
Format:	IgY

Target Details

Gene Name:	EIF4E
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-EIF4E antibody was prepared from eggs of chickens laid after repeated immunizations with a synthetic peptide corresponding to a near C-Terminal portion of human EIF4E conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human EIF4E. This product is an IgY fraction antibody purified from monospecific chicken egg yolks by a multi-step process which includes selective precipitation and salt fractionation followed by extensive dialysis against the buffer stated above. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to bovine and 93% homology to rat, mouse, and rabbit.
Relevant Links:	• UniProtKB - P06730 • NCBI - NP_001124150.1 • GenelD - 1977

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-EIF4E Antibody has been tested in Western Blot and IHC. Expect a band at ~25-28kDa in western blot using appropriate tissues and lysates. Positive control used: HEK293T, MOLT-4 and Daudi lysates in Western Blot, Human Lung Adenocarcinoma Tissue in Immunohistochemistry.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
IHC:	1:1000
WB:	5 µg/ml

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.05 mg/ml by UV absorbance at 280 nm
Buffer:	0.002 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.0
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

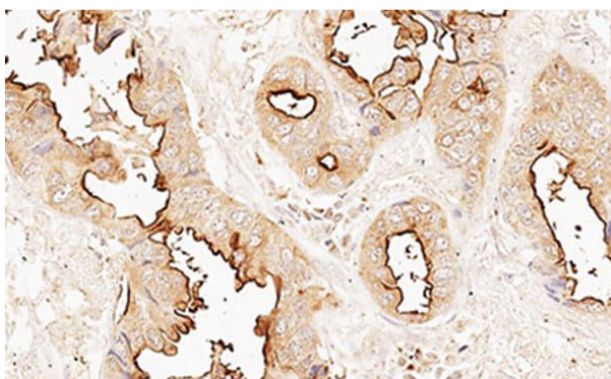
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

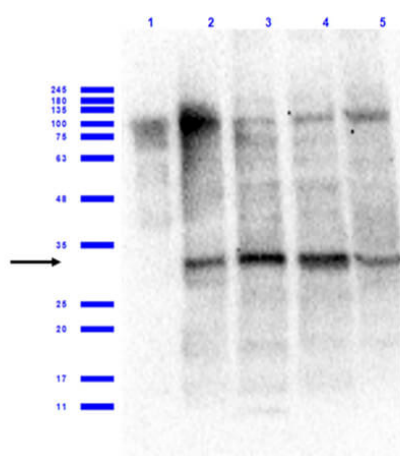
Expiration: Expiration date is one (1) year from date of receipt.

Images



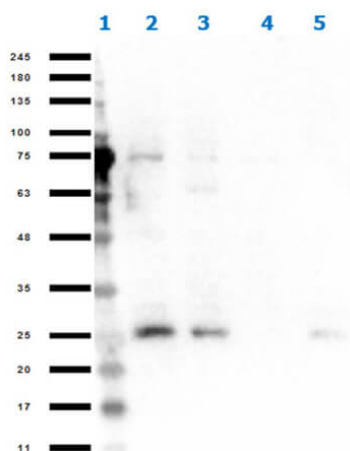
Immunohistochemistry

Immunohistochemistry of Chicken Anti-EIF4E Antibody.
 Tissue: Human lung adenocarcinoma tissue. Antigen Retrieval: HIER. Fixative: none. Primary Antibody: Anti-EIF4E at 1:1000 for 30 min at RT. Secondary Antibody: Anti-Chicken Counter stain: Hematoxylin. Substrate: DAB.
 Analysis Results: developed specific moderate cytoplasmic and membranous staining of columnar epithelial cells in human lung adenocarcinoma tissue, as is expected in the literature.



Western Blot

Western Blot of Chicken Anti-EIF4E Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: K-562 Lysate (p/n W09-001-GJ7). Lane 3: MOLT-4 Lysate (p/n W09-001-GK2). Lane 4: Daudi Lysate (p/n W090-001-MQ2). Lane 5: HeLa Lysate (p/n W09-000-364). Load: 35µg lysate/lane. Primary Antibody: Anti-EIF4E at 5µg/mL overnight at 2-8°C. Secondary Antibody: Goat Anti-Chicken IgG HRP (p/n 603-103-126) at 1:40,000 for 60 in at RT. Block: BlockOut Buffer (p/n MB-073). Predicted MW: ~25.1kDa. Observed MW: ~28kDa. Exposure: 20 sec.



Western Blot

Western Blot of Chicken Anti-EIF4E Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: EIF4E overexpressing HEK293T Lysate [10µg]. Lane 3: HEK293T empty vector Lysate [10µg]. Lane 4: Hep-G2 Lysate (p/n W09-001-GJ5) [35µg]. Lane 5: NIH3T3 Lysate (p/n W10-000-358) [35µg]. Primary Antibody: Anti-EIF4E at 1:500 overnight at 2-8°C. Secondary Antibody: Rabbit Anti-Chicken IgG HRP (p/n 603-4302-0500) at 1:40,000 for 60 in at RT. Block: BlockOut Buffer (p/n MB-073). Predicted MW: ~25.1kDa. Observed MW: ~25kDa. Exposure: 30 sec.

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.