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Datasheet for 600-401-934

EIF3F Antibody

Overview

Description:	Anti-eIF3f (RABBIT) Antibody - 600-401-934
Item No.:	600-401-934
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	eIF3f, also known as eukaryotic translation initiation factor 3 subunit 5, eIF-3 epsilon, and eIF3 p47 subunit, binds to the 40S ribosome and promotes the binding of methionyl-tRNA and mRNA. EIF3f also associates with the complex p170-eIF3. eIF-3 is composed of at least 12 different subunits, eIF3f is one of these subunits.
Synonyms:	rabbit anti-eIF3F Antibody, eIF-3 epsilon antibody, eIF3 p47 antibody, eIF3-p47 subunit antibody, EIF3S5 antibody, Eukaryotic translation initiation factor 3 subunit 5 antibody, Eukaryotic translation initiation factor 3 subunit F, Deubiquitinating enzyme eIF3f
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	EIF3F
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 100-125 of human eIF3f protein.

Purity/Specificity:	This affinity-purified antibody is directed against human eIF3f protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with eIF3f protein from human, mouse, rat, chimpanzee, chicken, and bovine based on 100% homology with the immunizing sequence. Partial reactivity is expected against eIF3f from Drosophila melanogaster and Tetraodon nigroviridis (pufferfish) based on 90% homology of the immunizing sequence with eIF3f from these sources. Reactivity against homologues from other sources is not known.
Relevant Links:	• NCBI - 6685511 • UniProtKB - O00303 • GeneID - 8665

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity-purified antibody has been tested for use in ELISA, western blot and immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 38 kDa in size by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IHC:	User Optimized
WB:	1:200 - 1:2,000

Formulation

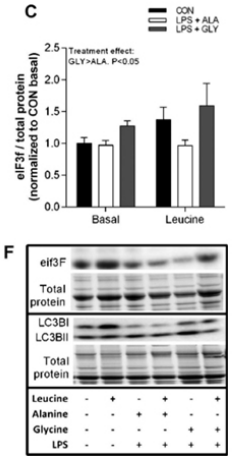
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

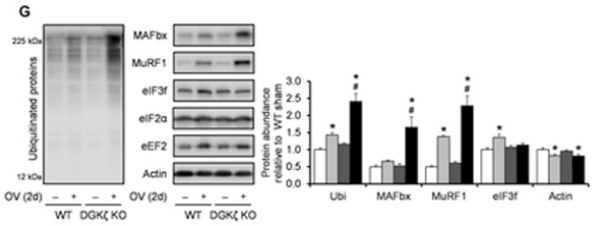
Shipping Condition:	Dry Ice

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.

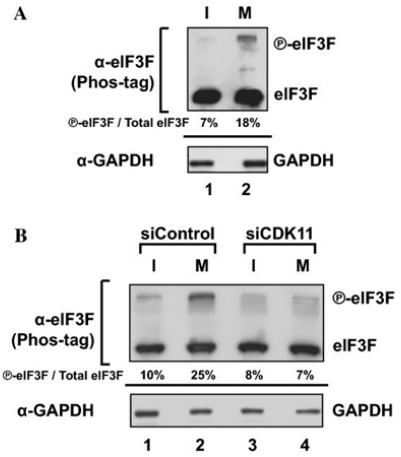
Images



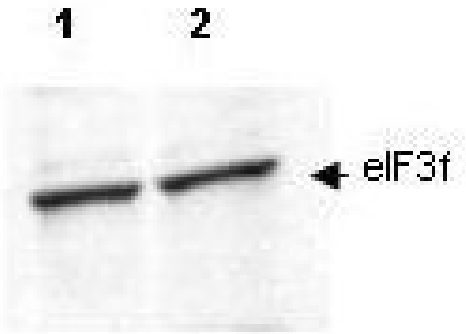
Western Blot
Glycine restores the leucine-induced inhibition of autophagic signaling. quantification of protein expression for eukaryotic initiation factor 3f (eIF3f; C) and representative Western blots (F) in glycine (GLY)- and alanine (ALA; control amino acid)-treated mice 4 h after an injection of either saline (CON) or LPS (1 mg/kg) and 1 h after an injection of either saline (basal) or leucine. Significant differences ($P < 0.05$) and trends ($P \leq 0.10$) are shown where appropriate. Main effects for treatment or leucine are reported in the top left corner of each graph where appropriate. # and ***Trend or a significant difference at $P < 0.05$, $P < 0.01$, or $P < 0.001$ between basal and leucine-stimulated conditions for the respective group. Fig. 4. PMID: 27094036



Western Blot
(G) Western blotting to detect the indicated proteins (n = 5 to 8 from three to four mice per group). Values were expressed as means (+SEM in graphs). *$P < 0.05$ compared to sham within the same genotype, #$P < 0.05$ compared to WT within the same surgery (C, D, F, and G) or MIC+ (E), ·$P < 0.05$ compared to non-MG132 within the same genotype and surgery, Student's t test (A to B) or two-way ANOVA (C to G). Ubi, ubiquitin. Fig 3. PMID: 29764991



Western Blot
Endogenous eIF3F is phosphorylated by CDK11/p58 during M phase. A) The phosphorylation levels of endogenous eIF3F in interphase- and M phase-synchronized HeLa cells were measured by western blotting using Phos-tag SDS-PAGE. Slower migration of phosphorylated eIF3F in Phos-tag SDS-PAGE results in separation of fast-migrating under-phosphorylated and slow-migrating hyper-phosphorylated eIF3F (p-eIF3F) bands in the gel. Protein levels of (p-eIF3F) and eIF3F were detected by western blotting using an anti-eIF3F antibody. The ratios of (p-eIF3F) /total eIF3F are depicted. The levels of GAPDH were monitored as a loading control. B) Phosphorylation levels of endogenous eIF3F in interphase- or M phase-synchronized HeLa cells with (lanes 3 and 4) or without knockdown (lanes 1 and 2) of CDK11 were monitored by western blotting using Phos-tag SDS-PAGE. Protein levels of (p-eIF3F) and eIF3F were detected by western blotting using an anti-eIF3F antibody. The ratios of (p-eIF3F) /total eIF3F are depicted. The levels of GAPDH were monitored as a loading control. Fig 4. PMID: 32030451



Western Blot
Western blot using Rockland's affinity purified anti-eIF3f antibody shows detection of endogenous eIF3f in lysates from both control HeLa cells (lane 1) and HeLa cells transformed with the kinase cdk11 (lane 2). Cdk11 is responsible for phosphorylating eIF3f in vivo. After SDS-PAGE and transfer, the membrane was probed with the primary antibody diluted to 1:200. This antibody recognizes both phosphorylated and non-phosphorylated eIF3f. Personal Communication, Jiaqi Shi, Univ. Arizona, Tucson, AZ.

References

- An S et al. A cyclin-dependent kinase, CDK11/p58, represses cap-dependent translation during mitosis. *Cell Mol Life Sci.* (2020)
- You et al. A DGKζ-FoxO-ubiquitin proteolytic axis controls fiber size during skeletal muscle remodeling. *Science Signaling* (2018)
- Ham et al. Glycine restores the anabolic response to leucine in a mouse model of acute inflammation. *American Journal of Physiology-Endocrinology and Metabolism* (2016)

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