Rabbit (polyclonal) Anti-eIF2α Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	AHO1182
Lot Number:	See product label
Quantity/Volume:	100 µg/0.2 mL
Isotype:	Rabbit Ig
Form of Antibody:	Purified immunoglobulin in phosphate buffered saline, pH 7.2, with 1% bovine serum albumin.
Preservation:	0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified from rabbit serum by affinity chromatography.
Immunogen:	Recombinant eIF2α.
Specificity:	Eukaryotic initiation factor 2α (eIF2α) is a 36 kDa, ubiquitously expressed protein. eIF2α, eIF2β and eIF2γ comprise the three subunits of eukaryotic initiation factor (eIF), a key molecule in the regulation of protein translation. In mammalian cells, stress induces the phosphorylation of eIF2α at serine 52 by at least two kinases: the haem-controlled repressor (HCR) and the interferon inducible double stranded RNA-dependent protein kinase (PKR). Phosphorylation of eIF2α blocks the GDP-GTP exchange activity of eIF2β, leading to inhibition of protein synthesis, growth suppression, and apoptosis induction.
Species Reactivity:	Human, mouse and rat. Other species were not tested.
Applications:	This antibody is suitable for use in Western blotting.
Suggested Working Dilutions:	For Western blotting, the recommended concentration is 1 µg/mL. The optimal antibody concentration should be determined for each specific application.
Recommended Positive Control:	Human HeLa cells, mouse 3T3L1 cells, and rat L6 cells.
Storage:	Store at 2-8ºC. For long term storage, apportion into working aliquots and store at –20ºC. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

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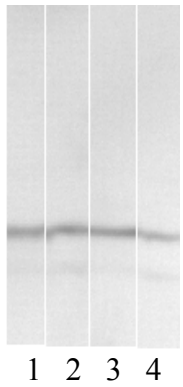

Western Blot Analysis
Proteins from cell extracts of human HeLa cells (lane 1), mouse 3T3L1 cells (lane 2), human Jurkat (lane 3), and rat L6 cells (lane 4) were resolved by SDS-PAGE and transferred to PVDF. The membranes were incubated with this antibody at a concentration of 1 µg/mL. After washing, the membranes were incubated with a goat $F(ab')_2$ anti-rabbit IgG alkaline phosphatase conjugated secondary antibody (Cat. # ALI4405) at a 1:2000 dilution. Bands were detected with CDP-substrate using the WesternStar™ method (Tropix) and Kodak BioMax film.

References:

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Related Products:

Mouse (monoclonal) Anti-eIF2α Antibody	Cat. #	AHO0802
eIF2α [pS^{52}] Phosphospecific Antibody	Cat. #	44-728G
eIF4G [pS^{1108}] Phosphospecific Antibody	Cat. #	44-526
PKR [pT^{451}] Phosphospecific Antibody	Cat. #	44-668G
eIF4E [pS^{209}] Phosphospecific Antibody	Cat. #	44-528G
eIF2Bε [pS^{539}] Phosphospecific Antibody	Cat. #	44-530G
β-Catenin [pT^{45}] Phosphospecific Antibody	Cat. #	44-208G
3T3L1 adipocytes +/- LIF	Cat. #	55-160
Cell Extraction Buffer	Cat. #	FNN0011

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PI AHO1182 (Rev 10/08) DCC-08-1089