



Mouse (monoclonal) Anti-eIF-2 α Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	AHO0802
Lot Number:	See product label
Quantity/Volume:	0.1 mg/0.2 mL
Clone Number:	EIF2 α
Isotype:	IgG1 (mouse)
Form of Antibody:	Purified immunoglobulin in phosphate buffered saline, pH 7.4.
Preservation:	0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified from ascites by Protein A/G chromatography.
Immunogen:	Recombinant human eIF-2 α .
Specificity:	This antibody recognizes the α subunit of eukaryotic translation initiation factor 2 (eIF-2 α). It is a 36 kDa protein and is ubiquitously expressed in many cell types. The eIF-2 protein, which is composed of three subunits (α , β and γ), is one of the key molecules in the initiation of translation. The phosphorylation of eIF-2 α is an important regulatory process in protein synthesis. In mammalian cells, eIF-2 α is phosphorylated at serine 51 by at least two kinases: the haem-controlled repressor (HCR) and the interferon inducible double stranded RNA-dependent protein kinase (PKR). Phosphorylation of eIF-2 α blocks the GDP-GTP exchange activity of eIF-2 β , resulting in the suppression of protein synthesis.
Species Reactivity:	Human, mouse and rat. Other species were not tested.
Applications:	This antibody is suitable for Western blotting. Other applications have not been tested.
Suggested Working Dilutions:	For Western blotting, use 1:500-1:1000 dilution. The optimal antibody concentration should be determined for each specific application.
Recommended Positive Control:	Human Jurkat, CEM and HeLa cells, mouse 3T3L1 and rat PC-12 cells.
Storage:	Store at 2-8°C. For long term storage, aliquot into small volumes and store at -20°C. Avoid repeated freeze-thaw cycles to avoid denaturing the antibody.

This product is for research use only. Not for use in diagnostic procedures.

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References:

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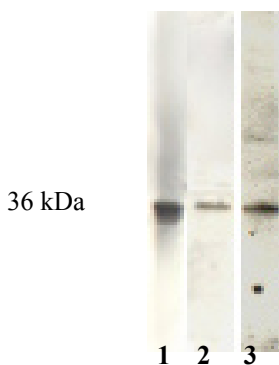
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Cell extracts prepared from human CEM (lane 1), HeLa (lane 2) and rat PC-12 cells (lane 3) were resolved by SDS PAGE on a 4-20% Tris-glycine gel. The proteins were then transferred to PVDF membrane. Membranes were incubated with 1 μ g/mL anti-eIF-2 α antibody for 1 hour. After washing, membranes were incubated with goat F(ab')₂ anti-mouse IgG alkaline phosphatase (cat. # AMI4405) and bands were detected using the Tropix WesternStar™ detection method.

The data show that the anti-eIF-2 α antibody recognizes a 36 kDa band in the cell extracts.

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