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eIF4H Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H Mk	Sensitivity: Endogenous	MW (kDa): 25, 27	Source/Isotype: Rabbit	UniProt ID: #Q15056	Entrez-Gene Id: 7458
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

eIF4H Antibody detects endogenous levels of total eIF4H protein (both long and short isoforms).

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a sequence of human eIF4H. Antibodies are purified by protein A and peptide affinity chromatography.

Background

A variety of factors contribute to the initiation of translation. Eukaryotic translation initiation factor 4H (eIF4H) was purified to near homogeneity from rabbit reticulocyte lysate and shown to stimulate translation in an assay deficient in eIF4F and eIF4B (1). eIF4H induces the RNA-dependent ATP hydrolysis catalyzed by the initiation factors eIF4A and eIF4B (1,2). eIF4H was further shown to stimulate the initial rate and extent of eIF4A-mediated mRNA secondary structure unwinding (3). Interaction between eIF4H and the herpes simplex virus shutoff protein (Vhs) appears to be important for Vhs-mediated degradation of mRNA (4). Deletion of a large region of chromosome 7, including the corresponding eIF4H gene, results in Williams-Beuren Syndrome (WBS), an autosomal dominant disorder that can present with cardiovascular problems, mental retardation and distinctive facial features (5).

Background References

1. Richter-Cook, N.J. et al. (1998) *J Biol Chem* 273, 7579-87.
2. Rogers, G.W. et al. (1999) *J Biol Chem* 274, 12236-44.
3. Rogers, G.W. et al. (2001) *J Biol Chem* 276, 30914-22.
4. Sarma, N. et al. (2008) *J Virol* 82, 6600-9.
5. Osborne, L.R. et al. (1996) *Genomics* 36, 328-36.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **Mk:** Monkey

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