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EIF5 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI13557

Specification

EIF5 antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	P55010
Other Accession	NM_183004, NP_892116
Reactivity	**Human, Mouse, Rat, Rabbit, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Chicken, Horse, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**49kDa KDa**

EIF5 antibody - N-terminal region - Additional Information

Gene ID 1983

Alias Symbol	**EIF-5A**

Other Names
Eukaryotic translation initiation factor 5, eIF-5, EIF5

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-EIF5 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
EIF5 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

EIF5 antibody - N-terminal region - Protein Information

Name EIF5

Function
Component of the 43S pre-initiation complex (43S PIC), which binds to the mRNA cap-proximal region, scans mRNA 5'-untranslated region, and locates the initiation codon (PubMed:11166181, PubMed:22813744, PubMed:24319994). In this complex, acts as a GTPase- activating protein, by promoting GTP hydrolysis by eIF2G (EIF2S3) (PubMed:11166181).

During scanning, interacts with both EIF1 (via its C-terminal domain (CTD)) and EIF1A (via its NTD) (PubMed:22813744). This interaction with EIF1A contributes to the maintenance of EIF1 within the open 43S PIC (PubMed:24319994). When start codon is recognized, EIF5, via its NTD, induces eIF2G (EIF2S3) to hydrolyze the GTP (PubMed:11166181). Start codon recognition also induces a conformational change of the PIC to a closed state (PubMed:22813744). This change increases the affinity of EIF5-CTD for EIF2-beta (EIF2S2), which allows the release, by an indirect mechanism, of EIF1 from the PIC (PubMed:22813744). Finally, EIF5 stabilizes the PIC in its closed conformation (PubMed:22813744).

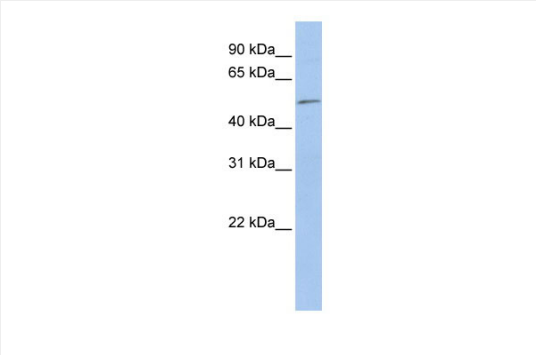
Cellular Location
Cytoplasm.

EIF5 antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EIF5 antibody - N-terminal region - Images



WB Suggested Anti-EIF5 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: Hela cell lysate
There is BioGPS gene expression data showing that EIF5 is expressed in HeLa

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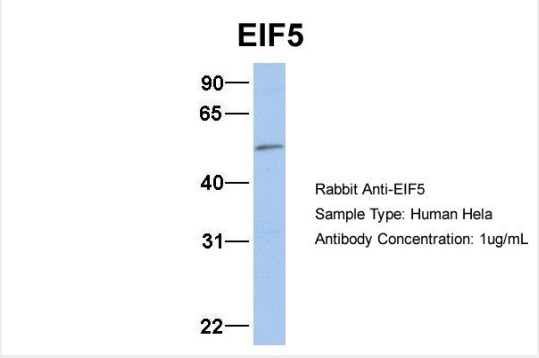

Host: Rabbit
Target Name: EIF5
Sample Tissue: Hela
Antibody Dilution: 1.0µg/mlThere is BioGPS gene expression data showing that EIF5 is expressed in HeLa

EIF5 antibody - N-terminal region - References

Si K.,et al.J. Biol. Chem. 271:16934-16938(1996).
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.