

EIF5 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22055c**Specification**

EIF5 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P55010
Other Accession	P59325 , Q5R4L0 , Q07205
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	49223

EIF5 Antibody (Center) - Additional Information**Gene ID** 1983**Other Names**

Eukaryotic translation initiation factor 5, eIF-5, EIF5

Target/Specificity

This EIF5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 267-298 amino acids from the Central region of human EIF5.

Dilution

WB~~1:2000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EIF5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EIF5 Antibody (Center) - 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

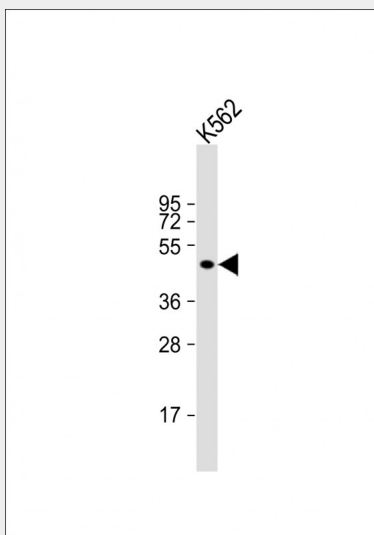
Cytoplasm.

EIF5 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EIF5 Antibody (Center) - Images



Anti-EIF5 Antibody (Center) at 1:2000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

EIF5 Antibody (Center) - Background

Catalyzes the hydrolysis of GTP bound to the 40S ribosomal initiation complex (40S.mRNA.Met-tRNA[F].eIF-2.GTP) with the subsequent joining of a 60S ribosomal subunit resulting

in the release of eIF-2 and the guanine nucleotide. The subsequent joining of a 60S ribosomal subunit results in the formation of a functional 80S initiation complex (80S.mRNA.Met-tRNA[F]).

EIF5 Antibody (Center) - 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.