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eIF5B Polyclonal Antibody

Catalog # AP69704

Product Information

Application	WB, IHC-P
Primary Accession	O60841
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	138827

Additional Information

Gene ID	9669
Other Names	EIF5B; IF2; KIAA0741; Eukaryotic translation initiation factor 5B; eIF-5B; Translation initiation factor IF-2
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

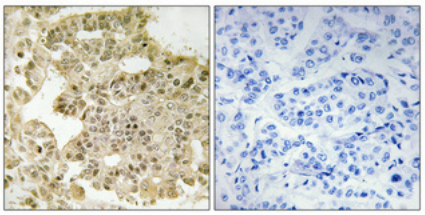
Name	EIF5B
Synonyms	IF2, KIAA0741
Function	Plays a role in translation initiation (PubMed: 10659855, PubMed:35732735). Ribosome-dependent GTPase that promotes the joining of the 60S ribosomal subunit to the pre-initiation complex to form the 80S initiation complex with the initiator methionine-tRNA in the P-site base paired to the start codon (PubMed:10659855, PubMed:35732735). Together with eIF1A (EIF1AX), actively orients the initiator methionine-tRNA in a conformation that allows 60S ribosomal subunit joining to form the 80S initiation complex (PubMed:12569173, PubMed:35732735). Is released after formation of the 80S initiation complex (PubMed:35732735). Its GTPase activity is not essential for ribosomal subunits joining, but GTP hydrolysis is needed for eIF1A (EIF1AX) ejection quickly followed by EIF5B release to form elongation-competent ribosomes (PubMed:10659855, PubMed:35732735). In contrast to its procaryotic homolog, does not promote recruitment of Met-rRNA to the small ribosomal subunit (PubMed:10659855).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q05D44}.

Background

Plays a role in translation initiation. Translational GTPase that catalyzes the joining of the 40S and 60S subunits to form the 80S initiation complex with the initiator methionine-tRNA in the P-site base paired to the start codon. GTP binding and hydrolysis induces conformational changes in the enzyme that renders it active for productive interactions with the ribosome. The release of the enzyme after formation of the initiation complex is a prerequisite to form elongation-competent ribosomes.

Images



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.