For Research Use Only

EIF5B Polyclonal antibody

Catalog Number:13527-1-AP Featured Product 6 Publications

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Basic Information

Catalog Number:
13527-1-AP

Size:
150ul , Concentration: 350 ug/ml by Nanodrop and 213 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4404

GenBank Accession Number:
BC032639

GeneID (NCBI):
9669

UNIPROT ID:
O60841

Full Name:
eukaryotic translation initiation factor 5B

Calculated MW:
1220 aa, 139 kDa

Observed MW:
175 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:20-1:200
IF/ICC 1:20-1:200

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, A549 cells

IHC : human gliomas tissue,

IF/ICC : MCF-7 cells,

Background Information

Translation initiation requires the delivery of the initiator methionine tRNA to the 40S ribosomal subunit. The initiator methionine tRNA is delivered by the heterotrimeric complex EIF2 in a ternary complex with GTP that interacts with the 40S subunit. The resulting complex then binds to an mRNA and scans for the AUG start codon. Eukaryotic translation initiation factor 5B (EIF5B) plays a role in recognition of the AUG codon in conjunction with translation factor eIF2, which functions to general translation initiation by promoting the binding of the formylmethionine-tRNA to ribosomes, and promotes joining of the 60S ribosomal subunit. A single crossreactive polypeptide of 175 kDa was detected, whereas the predicted size of the protein was 139 kDa. This size discrepancy may be the result of posttranslational modifications of EIF5B or, perhaps more likely, of unusual behavior in SDS-PAGE caused by the highly charged N-terminal region of EIF5B (PMID: 10200264).

Notable Publications

Author	Pubmed ID	Journal	Application
Eunah Kim	30019215	Cell Mol Life Sci	WB
Xu Jiang	27959964	PLoS One	WB
Takayoshi Shirasaki	39565848	Sci Adv	WB

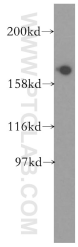
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

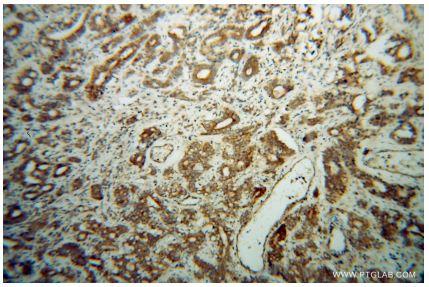
***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

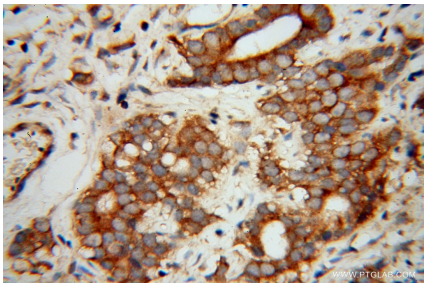
Selected Validation Data



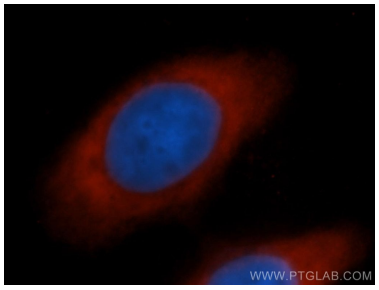
mouse brain tissue were subjected to SDS PAGE followed by western blot with 13527-1-AP (EIF5B antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human gliomas using 13527-1-AP (EIF5B antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human gliomas using 13527-1-AP (EIF5B antibody) at dilution of 1:100 (under 40x lens).



Immunofluorescent analysis of MCF-7 cells, using EIF5B antibody 13527-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).