10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EIF2B5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13090a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q13144
Other Accession	Q64350, NP_003898.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18974
Calculated MW	80380
Antigen Region	36-65

Additional Information

Gene ID	8893
Other Names	Translation initiation factor eIF-2B subunit epsilon, eIF-2B GDP-GTP exchange factor subunit epsilon, EIF2B5, EIF2BE
Target/Specificity	This EIF2B5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 36-65 amino acids from the N-terminal region of human EIF2B5.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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	EIF2B5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EIF2B5
Synonyms	EIF2BE

Function	Acts as a component of the translation initiation factor 2B (eIF2B) complex, which catalyzes the exchange of GDP for GTP on eukaryotic initiation factor 2 (eIF2) gamma subunit (PubMed:25858979, PubMed:27023709, PubMed:31048492). Its guanine nucleotide exchange factor activity is repressed when bound to eIF2 complex phosphorylated on the alpha subunit, thereby limiting the amount of methionyl- initiator methionine tRNA available to the ribosome and consequently global translation is repressed (PubMed:25858979, PubMed:31048492).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:P56287}

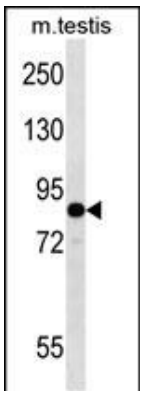
Background

This gene encodes one of five subunits of eukaryotic translation initiation factor 2B (EIF2B), a GTP exchange factor for eukaryotic initiation factor 2 and an essential regulator for protein synthesis. Mutations in this gene and the genes encoding other EIF2B subunits have been associated with leukoencephalopathy with vanishing white matter.

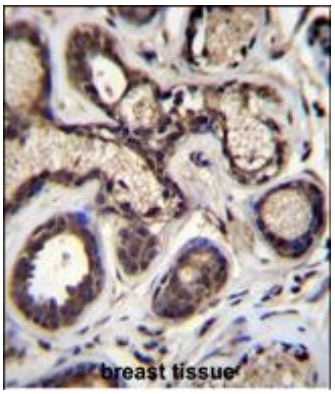
References

van der Lei, H.D., et al. Neurology 75(17):1555-1559(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Pronk, J., et al. Mult. Scler. 14(8):1123-1126(2008)
Glover, E.I., et al. Am. J. Physiol. Regul. Integr. Comp. Physiol. 295 (2), R604-R610 (2008) :

Images

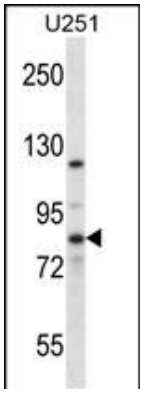


EIF2B5 Antibody (N-term) (Cat. #AP13090a) western blot analysis in mouse testis tissue lysates (35ug/lane).This demonstrates the EIF2B5 antibody detected the EIF2B5 protein (arrow).



EIF2B5 Antibody (N-term) (Cat. #AP13090a)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of EIF2B5 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

EIF2B5 Antibody (N-term) (Cat. #AP13090a) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the EIF2B5 antibody detected the EIF2B5



protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.