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eIF2B epsilon Recombinant Rabbit mAb

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Catalog # AP94816

Product Information

Application	WB, IHC-P, IHC-F, IF
Host	Rabbit
Clonality	Recombinant
Calculated MW	80 KDa
Physical State	Liquid
Immunogen	A synthesized peptide derived from human eIF2B5
Epitope Specificity	1-44/721
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the eIF-2B gamma/epsilon subunits family. Contains 1 W2 domain.
SUBUNIT	Complex of five different subunits; alpha, beta, gamma, delta and epsilon. Interacts with RGS2.
Post-translational modifications	Phosphorylated at Ser-544 by DYRK2; this is required for subsequent phosphorylation by GSK3B (By similarity). Phosphorylated on serine and threonine residues by GSK3B; phosphorylation inhibits its function.Polyubiquitinated, probably by NEDD4 (By similarity).
DISEASE	Defects in EIF2B5 are a cause of leukodystrophy with vanishing white matter (VWM) [MIM:603896]. VWM is a leukodystrophy that occurs mainly in children. Neurological signs include progressive cerebellar ataxia, spasticity, inconstant optic atrophy and relatively preserved mental abilities. The disease is chronic-progressive with, in most individuals, additional episodes of rapid deterioration following febrile infections or minor head trauma. While childhood onset is the most common form of the disorder, some severe forms are apparent at birth. A severe, early-onset form seen among the Cree and Chippewayan populations of Quebec and Manitoba is called Cree leukoencephalopathy. Milder forms may not become evident until adolescence or adulthood. Some females with milder forms of the disease who survive to adolescence exhibit ovarian dysfunction. This variant of the disorder is called ovarioleukodystrophy.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Nov 2009]

Additional Information

Target/Specificity	Widely expressed. Not detected in lymphocytes.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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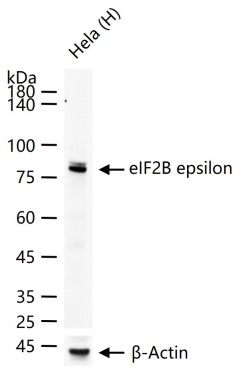
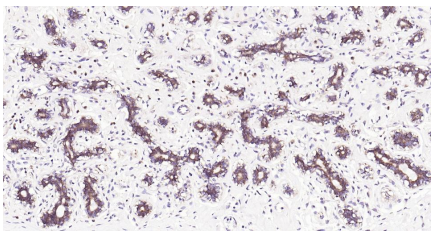
Images



25 ug total protein per lane of various lysates (see on figure) probed with eIF2B epsilon monoclonal antibody, unconjugated (AP94816) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Breast; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with eIF2B epsilon Monoclonal Antibody, Unconjugated(AP94816) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.